FUEL LINE

Defense Energy Support Center Vol. 2, 1999

MDW leads energy plan

By E...

...worth of improvements," Vincent emphasized. "That's $65 million we don't have in our budget right now."

President Bill Clinton spoke of the MDW "Energy-Savings Performance Contract," or ESPC, June 3, when he announced at a White House press conference that the Defense Department will award this month "the largest energy-saving contract in the history of the federal government." MDW, in connection with ... Defense Logistics Agency ... Energy Support ...

Clinton announces largest energy-saving contract

President Clinton announced June 3 that the Department of Defense intends to award the federal government's largest energy-saving performance contract ever to Pepco Energy Services and Viron Energy Services. Pepco Energy Services is a subsidiary of Potomac Electric Power Co. (NYSE: POM), Washington, DC, and Viron Energy Services is a subsidiary of York International Corp. (NYSE: YRK), York, PA.

In a special ceremony at the White House, the President announced the $200 million contract, designed to implement energy-savings measures for the Military District of Washington (MDW). The major Army command encompassing five ... George G. Meade in Maryland; ... A.P. Hill in Virginia; ... More

The 18-year MDW contract will result in approximately $220 million in overall cost savings. It will be administered by the Defense Logistics Agency's Defense Energy Support Center contracting office at Fort Belvoir.

"Energy-saving performance contracts illustrate how the federal and private sectors can create innovative solutions that will achieve significant savings for taxpayers and federal agencies," said Ed Mayberry, President and Chief Executive Officer of Pepco Energy Services. "We are excited that area military bases will soon be benefiting from our proven experience in helping customers, both governmental and commercial, make the right energy decisions."

"We are extremely pleased with this significant government contract, and so is our partner, Pepco Energy Services," added John Mahoney, president ... Energy Services. "We are committed to ... government and Military ... best value for ...

envelope, building automation systems, chillers, controls, HVAC, boilers and water conservation. Some of the more prominent energy-saving measures will include:

* ***Lighting***: Some 142,600 light fixtures will be replaced or retrofitted in 714 buildings, reducing energy consumption by 29.8 million kWh, saving $1.4 million annually and reducing greenhouse gas emissions by 4,800 MTCE.
* ***Cooling system retrofits***: A total of 888 cooling units will be replaced or retrofitted, cutting energy use in 343 buildings and reducing associated energy costs by over $1 million annually.
* ***Air handling units***: Replacement and retrofitting of air handling units in 126 buildings will reduce energy consumption by 14 million kWh. This will mean annual savings of $742,000 and 3,500 MTCE of greenhouse gas emissions avoided each year.
* ***Central heating plant upgrade***: Two central steam plants will be replaced with new gas-fired boilers, avoiding fuel use of 138,000 MMBTU an... annually.
* ***Cooling plant upgrade***: A ne... chilled-water distribution i... approximat...

Fuel Line

Fuel Line is an official publication distributed quarterly by and for the Defense Energy Support Center and fuel-oriented clientele. *Fuel Line* is prepared by desktop publishing applications and designed to provide timely, factual information on policies, plans, operations, and technical developments of the Center and interrelated subject matter. Views and opinions expressed in the *Fuel Line* are not necessarily those of the Department of Defense.

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On the cover...left to right, standing, Maj. Gen. Robert R. Ivany, commander, Military District of Washington; Edward Mayberry, president and CEO, Pepco Energy Services; seated, Sharon Murphy, director, DESC Energy Enterprise Office; and John Mahoney, president and COO, Viron Energy Services.

Contents

Director's Corner

DESC Director Gary S. Thurber

Now that a peace agreement has been agreed upon in Kosovo, it is time to step back and look at the level of support we provided our warfighters.

From March to the present, we bought and delivered over 413 million gallons of fuel to our customers for air operations in Kosovo. During this extremely busy period, our employees in every part of the world were actively involved in helping to meet our mission objective. I am extremely pleased to report that we have once again provided world class logistical support for which we are renowned. We have upheld the 35-year agency record of delivering the right fuel at the right location, on time, every time. No mission failures related to fuels. No mission delays related to fuels. And you are the standard bearers of this outstanding achievement. On behalf of the men and women serving in Kosovo, I extend my deepest appreciation to each of you for your dedicated service and commitment to excellence in everything you do.

Support to the mission in Kosovo notwithstanding, we have been busy with other major projects. We continue to provide support to the NATO peacekeepers in Bosnia-Herzegovina, Southern Watch, Northern Watch and Operation Deny Flight. These operations may not be garnering the attention they once did, but we are still committed to providing our warfighters in these operations with the same quality service and support.

Summer is generally the peak season for military members to move to new assignments. We will be saying farewell to a number of outstanding men and women who have served us diligently during their tours with DESC. We wish them all fair winds and following seas. To our new employees, we welcome them to Team DESC for a busy and exciting tour of duty. To find out more on who is leaving and who is coming on board, turn to *Newsmakers*.

I am extremely pleased to report that we have once again provided world class logistical support for which we are renowned.

I am one of those who will be departing; I have been called back to the Defense Logistics Agency by Lt. Gen. Glisson. Although I am honored by the director's request for me, I will miss being with DESC. This assignment has been one of the major highlights of my career.

I have the utmost admiration for the men and women at DESC. Making site visits to the regions in the Pacific, Europe and the Middle East, I have heard nothing but praise from DESC's customers. They don't worry about fuel not being available where they need it. They **know** DESC is a national asset.

I have truly enjoyed my assignment and know the incoming director will also have the rich experiences I have had.

On other business, we are putting the final touches on a new business plan for the agency. It is a plan that sets goals and objectives and establishes guidelines for us to measure the level of our success. If we all commit to the plan, we will earn big dividends in improvements to our processes and programs, making us more efficient and effective in our own jobs.

The business plan and its subsequent workforce development plan will train and prepare employees to move into the next century with the skills and abilities necessary for success. I look forward to watching your progress.

Best wishes to a world class organization—a bright star on the DLA horizon.★

DESC-Europe Honors Fallen Heroes

DESC-Europe paid its respects to America's fallen heroes this Memorial Day by participating in an official ceremony at the Luxembourg American Memorial Cemetery on Saturday, May 29, 1999. Capt. Jeffrey Dennis, an assistant facilities engineer, attended the ceremony for DESC-EU Commander, Lt. Col. Bruce Hover, who was unable to attend due to mission support in the Balkans.

When Col. Hover accepted the invitation, he noted that "we often overlook the real meaning of Memorial Day and associate the holiday with barbecues and volleyball. It is the civic duty of every American Service member and civilian to pay their respects to those who protected the freedom we enjoy." DESC-EU personnel showed their gratitude by donating the wreath that was laid at the memorial honoring our heroes.

Facilities branch employee and Vietnam War veteran Markus Schnell was one of the organizers of the event. "I saw a lot of young men pay the ultimate sacrifice in Vietnam," remarked Schnell, "and it does my soul good to see the huge turnout here today to pay them respect."

DESC-EU was officially invited to participate in the ceremony by American Cemetery Superintendent Leland Atkinson, who remarked that "we have had more agencies [participate] this year than we had in the past. I attribute most of the increase to the huge success of the Steven Spielberg film, *Saving Private Ryan*."

Capt. Jeffrey Dennis renders a salute after laying the DESC-Europe wreath at the Luxembourg American Cemetery Memorial.

In addition to the wreath laying, the ceremony included a missing man formation F16 fly-over and the playing of taps by the Luxembourg Army Band. Guest speakers included the Luxembourg prime minister, the American ambassador, and the commander of the 52nd Tactical Fighter Wing.

The Luxembourg American Memorial Cemetery, located three miles east of Luxembourg City, was established in 1944. It is the final resting place of 5,076 American servicemen, many of whom gave their lives in the "Battle of the Bulge." It is also the final resting place of General George S. Patton.

To learn more about Luxembourg and other American military cemeteries and memorials, access the following Web site: *www.usabmc.com.*★

NEWSMAKERS. . .

DESC
Employees of the Month

Outstanding job performance recently earned the following employees recognition under DESC's Employee of the Month program. Here's how they make their contributions to the Center's success:

March

Marsha Kidd

Marsha Kidd, an accounting technician in the Financial Analysis and Integrity Division of the Resources Management Directorate, handles payment-related problems associated with the Defense Fuel Automated Management System (DFAMS) and the Automated Voucher Examination and Disbursement System (AVEDS). Last January, Ms. Kidd noticed that, due to a recent program change, fuel lift postings to DFAMS were not updated with the latest escalated price. Corrected price changes were sent to DFAMS and AVEDS, limiting the impact on contractor payments. Ms. Kidd's timely identification of the problem minimized the severity of the difficulty and prevented significant distortions in contractor payments, saving time and effort for DESC and DFAS personnel.

April

Kathryn Fantasia

Although Kathryn Fantasia, a contract specialist in the Direct Delivery Fuels CBU, spends most of her time working with the Alaskan Posts, Camps and Stations Program, she recently distinguished herself during the organization of a pre-bid conference. When a scheduling conflict prohibited the office expert on the Paperless Ordering and Receipt Transaction Screens (PORTS) system from presenting a briefing, Ms. Fantasia stepped in to assist. Her ability to make the complicated and confusing appear simple resulted in an effective briefing, presented in terms that all could understand.

Employees of the Month

May

Natalie Thunberg, a contract specialist in the Alternative Fuels CBU, was the lead buyer for DESC's annual natural gas solicitation in 1997 and 1998. This year, she continues to provide proactive assistance to the current lead buyers as well as administering the highest value contract within the natural gas division. In addition to her contracting responsiblities, Ms. Thunberg was instrumental in organizing DLA's "Fifth Annual Women's Focus Weekend" in March and presented an impromptu briefing on the weekend's activities to the DLA Executive Steering Committee.

Natalie Thunberg

June

Donnie Robinson

Donnie Robinson, a distribution facilities specialist in the Facilities Management CBU, also serves as the technical expert for European activities. As the DESC point of contact for documentation and preparation of terminal storage requirements and budget data, his responsibilities include management of contractor-owned, contractor-operated storage facilities in Italy, Greece and Germany as well as support of the Bosnia-Herzegovina, and Split, Croatia operations. He was also instrumental in the initiation of new contractor-owned, contractor-operated infrastructure contracts in Portland, Oregon, Los Angeles, San Francisco, and Watson, California, as well as providing technical expertise for contracting out the Air Force's Rhein-Main, Germany alongside aircraft refueling operations. As a result of Mr. Robinson's efforts, the Air Force will receive critical refueling services under a new contract in October.

July

Lawrence Rice, a procurement analyst in the Center's Senior Procurement Office, was instrumental in organizing all elements of DESC's Acquisition and Logistics Reform Week held June 7-11, 1999. Activities included internal and external speakers for DESC's standdown day on June 9, 1999, a field trip to Pentagon events kicked off by Secretary of Defense William Cohen, a Web-based audio and video chat room featuring DESC energy initiatives, and a full week of video presentations concerning acquisition reform topics. His attention to detail and thorough follow-up provided DESC employees and management with a full week of activities to enhance the professionalism of the work force.

Lawrence Rice

DESC Employee Wins Standardization Award

Services Agree to Use Commercial Procedure

Each year the Defense Standardization Program presents an award to an individual and activity from each Military Service and the Defense Logistics Agency for outstanding efforts to reform acquisition practices. Criteria for nomination include integrating military and commercial practices, improving performance, developing new procedures and saving money.

This July, the 1998 DLA award was presented to the Defense Energy Support Center's Richard Brawley, standardization program manager for petroleum and associated products. Mr. Brawley spearheaded an initiative to streamline the process used by contractors when selling petroleum products and providing refueling services at commercial airports under DESC's Into-Plane Purchase Program. Contractors will be able to use one industry standard form when conducting business with any Military Service or commercial customer instead of the current system which requires unique forms for each Service. ATA 103, Air Transportation Association Standard of Jet Fuel Quality Control at Airports, will replace MIL-STD-1548, Into-Plane Services of Fuels at Commercial Airports at domestic locations.

Use of industry standards will also affect DESC's overseas Into-Plane contract locations by working closely with the International Air Transport Association (IATA) and the Joint Industry Guidelines (JIG). The ultimate goal is to develop a single industry document that can be used by all users, commercial and government, both domestically and overseas.

Richard Brawley

More than two years in the making, the agreement between DESC and the Military Services to use the commercial form will affect about $168 million worth of contracts per year. Expected benefits include reduced paperwork, time and money savings, increased competition as the standardized process draws more contractor bids, and strengthened partnership with airlines as the military switches to industry standards. Transition to the new system will take place over the next three years.★

On the Move. . .

DESC-Ft. Belvoir

Direct Delivery Fuels

Promotions

Dorothy Gheen, promoted to contract specialist.

New Employees

Mary Grace Berry-Mercier, procurement technician

Nancy Barnett, contract specialist

Ann Wilson, contract specialist

Facilities Management

Retirements

Maj. Harold D. Hites, chief, Programs Branch, Inventory Division, Facilities Management

Executive Support Office

Awards

David Kronberger, public affairs specialist, 1998 Excellence in Human Relations Award

Willie Taylor, supply manager, 20-Year Service Award

DESC-Europe

New Personnel

Robert Krouse, distribution facilities specialist

Cpt. Jeffrey P. Dennis, assistant facilities officer

John H. Goodworth, Jr., deputy director, DESC-Europe

Departures

Christine Jones, administrative team leader/management analyst,

accepted a management analyst position with the Defense Reutilization and Marketing Service in Battle Creek, Michigan.

Maj. Gary Jones, operations officer, moving to commander, 37th Supply Squadron, Lackland AFB, Texas.

Promotions

1st Lt. Joseph Dingman, USAF, DESC-Livorno, promoted to captain and selected for the Air Force Undergraduate Pilot Training Program.

Tech. Sgt. Charles S. Kastner, temporarily reassigned from Ft. Dix to DESC-Europe in support of Operation Allied Force, promoted to master sergeant.

Awards

Sgt. 1st Class Wayne Holland, Joint Service Achievement Medal

Capt. Jeffrey Dennis, 1998 Itschner Award

DESC-Pacific

New Personnel

Maj. Peter Camit, commander, DESC-Camp Smith

Lt. Col. Verdis Redmon, commander, DESC-Anchorage

Maj. Mark Aicher, commander, DESC-Yokota

Capt. Richard Ellis, operations officer, DESC-Pacific

Brian Adkins chief, management support division, DESC-Taegu

Richard Eagan, chief, QAS North Residency (Pyongtaek), DESC-Taegu

Michael L. Anderson, chief, facilities division, DESC-Taegu

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DESC, Navy Develop Internet Database for Fuel Facilities

The Defense Energy Support Center's (DESC) Engineering Plans and Services Division has developed an innovative Internet database and Web site—the Facilities Management System (FMS)—which will provide real-time oversight of DoD and commercial fuel facility operations worldwide to approximately 700 sites and 1,000 end-users in the fuels community.

The Web site (http://160.147.203.70/test/index.html) will also track the status of facility capabilities and operations, equipment maintenance status and scheduled repairs, and equipment condition and operational status. It will allow DESC to input, approve, and track funding requests, task orders, and project requests.

DESC-FE's Dilip Patel, Tyrone Hall and John Roundy developed the Web site and dynamic database as part of a joint project with the Navy Space and Warfare Systems Center (SPAWARS) Charleston's Special Programs Branch.

In June 1998, DESC began working with SPAWARS to conduct site surveys at all military fuel facilities worldwide to determine what it would take to automate—that is, process without an extensive paper trail—fuel inventory and transactions. The DESC-Navy team developed a database to store the collected information. They later determined that, through the Internet, this data could be published to all the Services.

After proving that they could display and access this static information on the World Wide Web, the DESC team realized they could create a dynamic database system. This means that military facilities enter equipment function status (operational or non-operational) and maintenance data into the database (by accessing the Web site) as the changes occur, and that information is immediately available to all military and DESC commands and facilities with access to the site.

This ambitious project meant reinventing the process of data collection and information management at DESC activities and facilities. It also meant designing a "user-friendly" system with existing database/Web site software using all standard Web browsers.

DESC and SPAWARS began developing the system in October, 1998, and the fully-functional FMS became operational in December. The system is currently in limited trial deployment at 30 fuel facilities. DESC plans to open the system to all Army, Navy, Marine Corps, Air Force, and DESC commands and facilities following test completion, targeted for the fall of 1999.

The DESC/SPAWARS project was nominated for DOD's Electronic Commerce Pioneer Award. The award recognizes superior achievements that move DoD toward its goal of a paperless contracting process by the year 2000. The database/Web site earned recognition at the June 10 Electronic Commerce Day activities in Washington when the DESC/

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On the Move. . .
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SMSgt. Jeffrey Wenrich, USAF, DESC-Taegu, QAS South Residency (Waegwan)

Retirements

Jim Stirling, facility engineer, DESC-Anchorage

Kathy Bailey, bulk fuel specialist, DESC-Anchorage

Awards

Maj. John Beecy, commander, DESC-Yokota, Defense Meritorious Service Medal

Lt. Col. Frank Rechner, deputy commander, DESC-Pacific, Defense Meritorious Service Medal

Maj. D.A. Lannom, operations officer/facilities manager, DESC-Pacific, Defense Meritorious Service Medal

David Acfalle, facility manager, DESC-Camp Smith, 20-Year Service Award

Miok Johnson, office support assistant, DESC-Taegu, Korean Civilian Service Medal

Chin Son Kim, transportation specialist, DESC-Taegu, 20-Year Service Award

DESC-Middle East

Lt. Col. Anthony Kazmierski, commander, DESC-Middle East, departs for a new assignment at the Pentagon with the Army Staff. He is replaced by Col. Marshall J. Jones, USA, former chief of the U.S. Southern Command's Joint Petroleum Office as well as interim chief of USSOUTHCOM's Logistics Operations Division. Col. Kazmierski was awarded a Defense Meritorious Service Medal for his service in the Middle East.★

Internet Database. . .
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SPAWARS team finished as one of three finalists in the "EC Pioneer" category.

Secretary of Defense William Cohen created the Joint Electronic Commerce Program Office at Ft. Belvoir in January 1998 as part of his Defense Reform Initiative. Since the initiative began, DoD has dramatically reduced overhead costs and delivery times for countless agencies and instituted the widespread use of government purchasing cards for most small purchases. According to DoD, since the first "E-Day," suppliers participating in a DoD electronic "mall" sold more than $27 million worth of everything from socks to semiconductors. DoD's e-mall may be accessed at *www.supply.dla.mil*.★

DESC Employees Selected for Upward Mobility Multifunctional Program

Eight DESC employees were recently selected for the Upward Mobility Multifunctional Program, which provides GS 5/7/9 employees with the opportunity to work in new departments to achieve career development and advancement, with a target to reach the GS-12 level. Selected candidates will become business specialists in a commodity business unit. The six-year program includes two years of technical work and four years of contracting work.

Pictured, left to right: Sharon Murphy, director of DESC's Alternative Fuels CBU and manager of the Multifunctional Program, Tammie Coll, Bill Chambers, Iris Fetgatter, DESC Director Gary Thurber, Patricia Littlejohn, Paul Jones, Carrie Cross, Montrez Nicholson and Landis Webb.

NEWSMAKERS. . .

DESC Hosts Acquisition and Logistics Reform Day

Don Peschka, deputy director of DESC's Bulk Fuels Commodity Business Unit, explains Kosovo contingency support efforts at the "Acquisition and Logistics Reform Day" seminar held June 9 at Ft. Belvoir. DESC hosted the seminar as part of the Defense Logistics Agency's June 7-11 Acquisition and Logistics Reform Week, which featured William Kenny, executive director for procurement management at DLA's Defense Logistics Support Command, among others.

DESC Director Visits United Arab Emirates

Traveling the streets of Jabel Ali, United Arab Emirates, proved interesting on DESC Director Gary S. Thurber's recent visit. One doesn't usually expect to see a camel "cruising" the streets of town.

DESC, Union Sign Partnership Agreement

Gary S. Thurber, DESC director, and Nancy Dibble, president of the American Federation of Government Employees Local 2449, sign a partnership agreement on April 8, 1999. The agreement establishes a collaborative framework for dispute resolution and improving organizational productivity.

EUROPE

DESC-Europe Supports Conflict in Kosovo

By Lt. Col. John P. Feiler, USAF

With all the attention everyone is giving to the Kosovo conflict, one would think that's where all the action is. That isn't true for employees of the Defense Energy Support Center-Europe. While the bombs are dropping everywhere in Kosovo and Yugoslavia, DESC-Europe has business in many other areas as well.

Supporting the Warfighter

When NATO approved military action against the Federal Republic of Yugoslavia, our office had already spun up personnel to support U.S. Forces going into Kosovo from the Former Yugoslav Republic of Macedonia. This was to be Task Force FALCON with the U.S. Army and Marines going into Macedonia from Greece. We worked diligently to identify how to support our Forces from the time they landed at the port, through their transition to their intermediate support base, onward into their forward operating base, and finally with sustaining logistical support.

At the time, we thought this was a pretty tough challenge to face, but we worked out all the details and were able to identify the needed resources to meet the challenge of supporting a mobile customer. Initially, we would provide fuel for our Forces while they were enroute to their Macedonia location. The French, with their role specialist nation mission for fuel, would provide the sustaining fuel.

Then we caught wind of a new plan called Task Force HAWK. At the time, it was just a small Army operation involving a few helicopters. The Army seemed to have settled down to one proposed location in Albania and we quickly identified a method to meet their requirement. How the plans did change!

The final location for TF HAWK was the Tirana, Albania airport. Fortunately for us, the original support concept for operations in Albania involved getting fuel at the port of Durres, Albania. Now, instead of transporting the fuel to the originally identified location, we simply had to move it inland to Tirana. Our Army customers are pleased that we have met all of their requirements.

We thought we were pretty good at solving the warfighters' requirements and took justifiable pride in our work. We were pleased that we had just overcome a difficult task. Then the U.S. Air Force stepped in with their requirements.

Pictured, left to right, front row:Tech. Sgt. Scott Kastner, Capt. Jet Mattus, Mr. Chuck McWilliams, Mr. Lloyd Thomas. Back row: Lt. Col. Bruce Hover, Lt. Kerry Heiss, Mr. Bill Brusso, Sgt. 1st Class Wayne Holland, Mr. Bob Koeller, Lt. Cmdr. Kash Grimes.

EUROPE

It turns out that the Army, in absolute terms, takes a lot of fuel to successfully execute their plans. However, in relative terms, they take only small "sips" of fuel in comparison to the Air Force. While we can't get into specific details of how much fuel is required for a single day of supply for any of our Forces, let's take a hypothetical look at relative needs.

For planning purposes, the Army told us the Apache helicopters burn about 145 gallons per mission. We see in the news that we sent 24 Apache helicopters into Albania. That equates to less than 3,500 gallons. To be fair, that's not the Army's entire requirement. Their requirement is quite a bit bigger than that, but it provides an idea of the magnitude of the Army requirement.

Now let's look at one KC-135 and one KC-10. According to Air Force Pamphlet 23-221, the KC-135 fuel load is an astounding 40,000 gallons; the KC-10 fuel load is an even more astounding 52,000 gallons! Those numbers are for *one* plane each. If you're keeping up with the news, you know we are supporting many more aircraft than that. You now have a feel for the magnitude of our challenge in meeting the demands of a fuel-thirsty Air Force. Meeting the requirement of those astounding numbers drove us to have logistics headaches!

Logistical Headaches

Working with NATO military, we pretty well know what to expect from our allies and suppliers. We even have standard NATO agreements to ensure compatibility. We know what happens if we go to the Netherlands for fuel—we pull our planes up to the gas pump and get it. The nozzles all fit. The connectors all connect. Fuel meets specifications. Everything comes together nicely. The same is true for operations in Italy, France, Norway and every other NATO country.

Road conditions in Albania.

On the other hand, with our new NATO allies in Hungary, Poland and the Czech Republic, there are no working standard agreements. Having just emerged from behind the Iron Curtain, they have simply not had sufficient time to adjust their industry to meet NATO requirements and specifications. When we go to suppliers in these countries and ask about the availability of fuel, that's only the first of many hurdles to clear.

In many areas within these countries, the support infrastructure is not capable of interfacing with any of our equipment. What we take for granted with our current NATO allies is a logistical headache in the new NATO countries. On several occasions we had to get an emergency procurement of hoses with Warsaw pact fittings on one end and NATO standard agreement fittings on the other end. To further complicate matters, the former Soviet Union countries don't seem to have an equivalent of standard agreements either, so we can't be sure that what works in one area within a single country will work in another area of the same country.

While working the infrastructure requirements, we also have to work the issue of getting fuel to the proper location. Driving in former Eastern Bloc countries is difficult because the roads are in poor condition. Even if you work from a port or a river to receive fuel, contractors or the Military must move the fuel from the port to an airport over these roads.

Of the new NATO allies, only Poland has seaports. At best, there are locations elsewhere that have rivers, some of which are navigable. At worst, the Air Force staging areas are remote locations with no ports, no railways and terrible roads. While those locations may be ideal for Air Force operations, they definitely present a serious challenge to logisticians.

We are also working on a rather unusual problem. With the best of intentions, the Air Force identified a requirement for a specific, large quantity of fuel at a particular location. With considerable effort, we arranged to get that quantity of fuel delivered. However, the Air Force has not flown their anticipated number of sorties. As a result, at one of our locations we now have more fuel than we need. So we have begun the process of relocating fuel from its intended location to an alternate location.

How is it that we were able to pull all of those rabbits out of the hat to face and overcome the logistics

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EUROPE

Kosovo. . .
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headaches? The answer is simple: We had to do a great job of helping ourselves through teaming.

Helping Ourselves

While you've been reading "DESC-Europe," in truth, it's simply "DESC." We in Europe get fantastic support from numerous other locations. At the very top of our chain, we receive key guidance, support and assistance from our commander, Lt. Col. Bruce Hover, who is on loan from DESC-Los Angeles. We have on-the-scene contracting support from Ft. Belvoir with Lt. Col. Mike Craig. DESC-Ft. Dix has provided two able-bodied helpers: Lt. Col. Dave Witwer, DESC-Ft. Dix commander and the DESC liaison to HQ USAFE/LG at Ramstein AB, Germany, and Tech. Sgt. Scott Kastner in Wiesbaden. Ft. Belvoir's Bulk Fuels sent a welcome asset to Wiesbaden—Lt. Cmdr. Kash Grimes. Without their hard work and dedication, this entire effort would have fallen short of the requirement.

The rest of the Wiesbaden staff in Operations and Support have been key to our success as well. Tracking what we have, where we have it, and how to get it from point "A" to point "B" fell to the Operations staff. Lloyd Thomas, Bill Brusso and Lt. Kerry Heiss, USN, made this happen. We received essential computer support from Dawn Overstreet and mission critical transportation support from Brett Overstreet. Jessie Hamilton procured emergency supplies with the assistance of contracting experts, Sam Bekele and Greg Winstead, and budgeteer, Jeannie McGuire. They, too, are part of the overall success of our mission.

Our European offices in Miesau, Germany; Livorno, Italy; London, England and the NATO headquarters in Brussels, Belgium also provide stalwart support to the overall effort. From providing railcars and barges out of Central Europe, to getting fuel and additives to the staging areas in Italy, to supporting tanker aircraft flying out of England and providing liaison activities with NATO commanders, our offices are at the forefront. Our laboratory in Kaiserslautern, Germany has also provided yeoman support with after-hours and emergency testing of suspect fuels. It takes the whole DESC team to accomplish a mission this large and complicated.

The DESC chain is as strong a chain as you will find anywhere.

Our home office in Ft. Belvoir is another key team player in making the DESC team a success story. The Bulk Fuels CBU continues to support the increased requirements needed by our customers. They make it look so easy! The contracting team in Direct Delivery Fuels has certainly made life easier for us by substantially expanding existing Into-Plane contracts and instituting new contracts where there was no previous coverage. Again, from our perspective, they make it look so easy.

Our final "ace in the hole" is Sgt. 1st Class Wayne Holland, our man on the scene in Albania during the initial ramp-up. He provided on-the-scene DESC expertise for four weeks—from April 15th to May 12th. His expert advice and assistance made setting up all the fuels logistics requirements immeasurably easier for the Army. To his credit, he did all of this prior to even having hot showers available. He lived through the worst part of setting up the Task Force HAWK ground operations. During his daily calls to our operations center, he frequently commented on how much fun the mud was. Without his dedication, this entire effort would have been a lot tougher.

Success is Ours (So Far)!

Have you noticed a recurring theme here? It takes a dedicated team to make this whole operation a success. You've heard it said before that a chain is only as strong as its weakest link. The DESC chain is as strong a chain as you will find anywhere. From our own internal European resources, to supplementary resources, to home office resources, we truly exemplify the DLA motto: "One Team—One Focus."

However, we cannot rest on our laurels. Only with continued vigilance and hard work will we maintain the level of success we now enjoy.★

MIESAU

DESC Responds to Surge in Central European Fuel Needs

By 1st Lt. Dale C. DeStefano, Chief, Plans Branch, DESC-Miesau

The Defense Energy Support Center-Miesau team got to learn first-hand what the Military Services mean when they prepare to "surge" during a recent increase in U.S. Air Force and Army fuel requirements throughout DESC-Miesau's area of responsibility.

Although the Central European Pipeline System (CEPS)-Division 6 was doing an outstanding job re-supplying both Ramstein and Rhein-Main Air Bases through the CEPS on a normal day-to-day basis, the huge surge in Air Force demands at Ramstein quickly exceeded CEPS' capability to meet those needs. Additional fuel stocks were also required at the U.S. Army's Intermediate Staging Base in Taszar, Hungary, which is used to support Operation Joint Forge. Consequently, the professionals of DESC-Miesau teamed together to find an alternate means of resupply to meet the increased fuel requirements.

The USAF fuel surge at Ramstein was a result of Air Force C-17 sorties deploying Task Force Hawk's Apache and MLRS (Multiple Launch Rocket System) deep strike force equipment to Albania. In all, there were a total of 635 sorties flown to Tirana, Albania, using nearly 6.3 million gallons of fuel from March 31st to May 10th. Additionally, KC-135 and KC-10 aircraft, staged at locations throughout Central Europe, supported strike aircraft of Operation Allied Force against Serbian military targets in the former Yugoslavia.

Fuel consumption at the Ramstein and Rhein-Main Air Bases increased from four million gallons to 23.8 million gallons in a similar time period—a 600 percent increase. Hauke Dins and Jose Zaurin of DESC-Miesau's Pipeline Section worked closely with the CEPS-Division 6 coordinating daily resupply of the bases. The increase at Rhein-Main did not exceed maximum output from the CEPS, so there was no resupply problem.

Ramstein, on the other hand, experienced a significant shortfall in fuel coming in through the pipeline and fuel going out to the planes. Although a 12-inch pipeline was constructed to join Ramstein to the CEPS, it was not expected to be in service until the end of June. Ramstein had to rely on its current 8-inch pipeline. The pipeline could only accommodate 425,000 gallons of fuel a day, while Ramstein was consuming more than 500,000 gallons a day, seven days a week. Ramstein asked DESC-Miesau for help in acquiring additional fuel.

DESC-Miesau transporters, led by Gunther von Dungen, chief, Operations Branch, and Dieter Hemm, transportation section chief, took charge of this mission. DESC-Miesau coordinated for a trucking company to resupply the airbase with tanker deliveries from Defense Fuel Support Point (DFSP) Speyer, Germany.

Within 24 hours, Ramstein began receiving 20 tanker deliveries a day. Each 9,000-gallon tanker made up to three round trips a day, with a three-and-a-half hour turnaround for each trip. As a result, DESC-Miesau was able to resupply Ramstein with an additional 180,000 gallons of JP8 each day. As Ramstein's stocks rose, the storage facilities eventually reached their pre-Allied Force level and, by the end of April, the tender was no longer needed.

Fuel requirements by truck and rail constantly increased during April, threatening to exhaust fuel stocks at Speyer. Richard Schmitt, DESC-Miesau's quality surveillance representative and property administrator for the Speyer contract, and Hauke Dins coordinated with the Erdoelbevorratungverband (EBV) (German Fuel Storage Association) for the transfer of 235,000 barrels (Jet-A1) to U.S. tanks at DFSP Speyer during May and June. EBV, which stores fuel for the German Army at Speyer, was about to rotate the fuel in May by replacing it with new product from the CEPS. At the same time, the CEPS was due to resupply DLA-contracted tanks at DFSP Speyer with 252,000 barrels. Instead, EBV transferred product directly from their tanks to the DLA tanks. When the transfer was

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Vaya Con Dios, Panama

DESC Returns Storage Tanks in Final Stage of Treaty Agreement

By Walter F. Rodee, Staff Quality Surveillance Specialist, DESC-Americas

The Defense Energy Support Center achieved an historic milestone when it returned JP8 underground fuel storage tanks located at the Arraijan Tank Farm in Panama to the Government of Panama and their property management agency, ARI, on March 31, 1999.

The well-organized transition and turnover was completed smoothly through close coordination with many folks at DESC and the Panamanian contractor, Alireza Mobil. Under the provisions of the Treaty of 1976, the United States is required to turn over control of the Panama Canal to the Panamanian Government and remove all U.S. military assets. Turning over the remaining fuel storage tanks was one of the United States' final stepping stones toward meeting the date established under the treaty—December 31, 1999, at 1200 hours.

Over the years, DESC has maintained a vital inventory at the Arraijan Navy Tank Farm in support of U.S. Southern Command's mission requirements in Central and South America. The Navy storage facility was transferred to the Government of Panama in January of 1997. Through a memorandum of understanding between the United States and Panama, DESC continued to maintain a substantial JP8 inventory at the facility. A Panamanian contractor maintained the facility, which included product accountability, quality control and operations at the facility. DESC also stored a limited volume of JP5 at the Rodman Naval Station. The JP5 storage was maintained for fleet support and associated air operations in the Panamanian theater. JP5 was also available for naval vessels transiting the canal.

Relinquishing our storage assets and drawing down inventories in Panama took a considerable amount of coordination between all appropriate agencies. Lt. Col. Marshall Jones of U.S. Southern Command-J4 took the early lead in planning and determining the known fuel requirements for all operational units during the drawdown phase. The Services were tasked throughout the phase to provide notification of mission changes and bring the most critical and relevant information to the treaty implementation meetings, which included DESC, U.S. Southern Command and the Government of Panama. Service members' efforts paid real dividends as reflected in a timely inventory reduction and the realization of all mission objectives throughout the drawdown period. Units remaining in Panama until final closure will experience no fuel shortages or mission shortfalls.

To ensure that DESC treaty implementation objectives could be met, the Center's strategy was divided into two timelines: pre- and post-December 1999. Presently, negotiations are in progress with the Government of Panama for final details involving activity at Howard AFB. As a limited mission still continues at Howard AFB, we continue to furnish support to the Air Force.

We are now working under a Memorandum of Agreement (MOA), which expires on December 31, 1999. Once all existing agreements expire, DESC will be free to negotiate directly with the Panamanian contractor, Alireza-Mobil, who will continue to operate the tank farm facility and the former Rodman Naval Station through separate agreements with the Government of Panama.

Col. David J. Hunt, USAF, and Ms. Sandy Aubrey of U.S. Southern Command's Office of Treaty Implementation have been invaluable in providing legal assistance and guidance in working with local authorities during the transition phase. Limitations and stumbling blocks were identified early and eliminated, contributing immensely to the smooth transition and unified negotiating strategy of the Defense Energy Support Center.

In January 1999, the MV Allegiance completed its last tanker discharge of an estimated 113,000 barrels of JP8 to U.S. Forces Panama. Scott Artrip, DESC-Houston quality surveillance representative, discharged the tanker cargo directly from the Rodman Naval Station pier into the Howard AFB fuel storage tanks. Once Howard AFB was full, the balance of the cargo was diverted into three active tanks at the Arraijan

PANAMA

tank farm, obtained under the existing MOA. All other storage tanks at the Arraijan tank farm had been converted to commercial use by their contractor, Alireza-Mobil.

Scheduling of the last tanker and working the precise volume required to complete final evacuation was a remarkable accomplishment. Working in concert with Stan Olsen, DESC-Tanker Branch, Lt. Col. Jones, U.S. Southern Command, and Capt. Tim Moore of the 24th Support Command at Howard AFB, the right volume was delivered to the right tank farm at the right time.

Woven into the Howard AFB closure package was an Into-Plane contract, awarded by DESC at the Tocumen International Airport, which provides for continued refueling support to U.S. Forces' aircraft once JP8 stocks are depleted. This new contract will also provide refueling support for transiting aircraft in the future once the treaty implementation is complete. The Howard AFB plan for continued refueling accentuated critical elements encountered during inventory drawdown. Timely and flexible, the plan took into consideration unforeseeable changes. Our initial planning always determines how well we respond to changes to the mission.

Initial evacuation from the Arraijan tank farm was tedious. The well-hidden tank farm was a World War II-era design and all of the fuel storage tanks were underground, built into rolling hills. There were surprises for us as we progressed, but each situation was handled quickly. Scott Artrip, the non-resident quality representative for Panama, played a critical role throughout the entire period. Product was recovered which could have been lost due to the bulk storage system design. Several miles of pipeline, on- and off-site, had to be drained and product recovered. Once all of the product was retrieved back to the Arraijan tank farm, the tank-to-tank recovery process began.

The terminal contractor drained all lines and related system components, and recovered and consolidated our product ahead of schedule. The consolidation process brought a windfall of extra product we had not anticipated, minimizing our unrecoverable losses to approximately 70 percent below initial projections. Taking safety precautions throughout the recovery process, we did not encounter any environmental problems and the contractor did a superb job of maintaining product integrity. In addition, considerable samples were tested at the contract laboratory, ITS Testing Services, in Panama City, Panama.

The well-hidden tank farm was a World War II-era design and all of the fuel storage tanks were underground, built into rolling hills.

As we enter into our final days in Panama, we are sad to depart, but we have a clear vision of our accomplishments. We never had a mission failure due to a shortage of fuel, nor did we ever experience an off-specification situation we were unable to correct. Over the years, so much was accomplished by the individuals upon whom we relied. The fuels team always met each objective and handled each challenge proudly and professionally. We are very grateful to all those members of the fuels family who served so well over the years. Their dedication and quality support will always remain as a permanent inscription in the Panamanian theater of operations.★

Central Europe. . .
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complete, CEPS resupplied the EBV tanks.

By transferring product within the tank farm at Speyer, the team saved time and reduced paperwork and pumping operations, facilitating a much smoother operation at DFSP Speyer.

If all of the aforementioned actions were not enough, increasing demands at Taszar, Hungary, required the DESC-Miesau transporters to pool their collective talents once again. In addition to everyday customers who, coincidentally, increased their need for support, the transportation team provided an additional 56 rail tank cars (RTCs) loaded with 644,500 gallons of JP8 to Taszar. They did this in spite of the rapidly decreasing fuel stocks, a Fuel System Icing Inhibitor shortage in Speyer, and the mountain of paperwork that comes with it all.

Since Taszar had top priority, some of the normal customer RTC issues were delayed and some truck shipments redirected to other CEPS depots, causing a backlog of more than 50 RTCs. Alternate means of resupply had to be found to offset this backlog. For example, the US Army's Grafenwoehr Training Center, normally resupplied via RTC, had to be replenished via a truck tender consisting of eleven 9,000-gallon tankers, which were then followed by a train of 16 RTCs loaded with 249,200 gallons of product.

The extreme flexibility and willingness of DESC's contractors and the team effort of DESC-Miesau's transporters made all these shipments possible without causing a depletion of fuel stocks at any destination. Now, the last obstacle—reducing that mountain of paperwork.★

Electricity Deregulates

DESC Expands Mission

By Claire McIntyre

Electricity, a $215 billion industry and a 100-year-old monopoly, is going through enormous changes. So much is at stake that law makers, environmentalists, utility companies, energy suppliers and politicians are pleading their cases on Capitol Hill, in state assemblies and on by-ways from California to Vermont. But it's the details, particularly on allocation of transitional costs, that are being thrashed out.

The federal government's decision to deregulate electricity is transforming it from a utility to a commodity. That means competition will finally come to one of the last monopoly hold-outs. And that means that there's money to be saved and money to be made. The majority of states are currently considering deregulation. A handful are expected to deregulate in 1999, with significant deregulation thereafter.

Enter the Defense Energy Support Center. In May 1996, DESC formed an electricity team and began work on a procurement strategy to buy and sell the utility while offering cost savings to potential customers. A year and a half later, Defense Reform Initiative Directive #9 mandated that all Department of Defense utilities be privatized by 2003. So DESC was ready, willing and able to expand its energy mission and venture into the electricity market. Just what has DESC been up to?

Basic Agreements

In addition to monitoring electricity deregulation and analyzing best commercial practices for several years, DESC came up with an innovative approach to this process by issuing regional Basic Agreements (BAs) in November 1997. Located in states that are undergoing restructuring, the BAs serve to streamline the procurement process by conducting proposal evaluations, including suppliers' technical capabilities ahead of time. As more states passed restructuring legislation, DESC issued additional BAs to encompass all regions/states. This reduces the time necessary to award a contract because, once a BA is in place, a contractor need only offer a price in response to a solicitation. BAs are good for five years and are updated annually or as needed. However, contractors can still make an offer on a solicitation without a BA.

Natural Gas

Electricity and natural gas run on the same track, so to speak. Similar principles run through the deregulating electricity industry as were present with the deregulation of natural gas in 1978. DESC began buying and selling natural gas in 1991. While the program grew slowly, DESC convinced customers of cost-saving advantages which, between 1991 and 1997, saved the federal government $175 million. Like electricity, federal, state and local laws applied to natural gas before deregulation. After deregulation, consumers could purchase gas from the existing utility or from vendors as a commodity. In fact, usually the same contractors that sell natural gas also sell electricity.

Deregulation of electricity has special meaning for DESC, the consumer, the commercial suppliers and the utilities.

DESC has the opportunity to supply another form of energy to its DoD customers using aggregate buys to achieve a lower cost than that charged by the utilities. If a commercial supplier cannot provide electricity at a cost of supply lower than the tariff costs under the current utility, then the customer would continue to use the present supplier.

DESC's entry into the electricity market involves a three-prong approach: providing energy as a commodity; providing and operating the equipment located *outside* facilities, including wires and transformers; and Energy Saving Performance Contracts, which provide and manage equipment located *inside* facilities, including light fixtures, cooling and air handling units, and boilers.

For more on ESPCs and the government's largest such contract awarded to date, see page 18.

For state-by-state deregulation status, see page 19.

In the next edition of *Fuel Line*—privatization of energy distribution systems.

Each Military Service now manages its own electricity utility. However, like its natural gas program, DESC's procurement of electricity will be centralized, relieving installations of ordering, delivery and accounting responsibilities. DESC supplies natural gas to 141 military installations that will likely have similar requirements for electricity.

According to Jacob Moser, a contract officer on DESC's electricity team, the Army has been particularly supportive of DESC's electricity mission, as has the Department of Energy, which prefers DESC's procurement methods to its own or those of the General Services Administration. "For them, DESC is the buyer of choice," says Moser. "Power marketers also like DESC's centralized approach to solicitation."

Commercial energy suppliers and utilities will, of course, vie for electricity business for the first time. Utility rates will still be determined by state tariffs. But under deregulation, components of electricity supply that used to be grouped together as part of a total package—generation, transmission and distribution—will be separated into independent functions. Under this "unbundling," the supplier of choice will provide the generation, or the electricity itself. Utility distribution companies will continue to provide the transmission and distribution as well as maintaining the power lines, although in the future transmission could be transferred to another provider.

Utilities, and ultimately, consumers, also face the problem of "stranded costs." These are investments that utilities made prior to deregulation that they won't be able to recoup under competition. For example, an investment in a power plant's infrastructure replacement would take many years to reach a pay-off status. So far, most states that have deregulated electricity have allowed utilities to recover stranded costs through a surcharge added to the customer's bill. Because these stranded costs are passed on to the consumer, savings may be very slight at the beginning of the transition from regulation to competition.

Federal Legislation and the Environment

As states deregulate, Congress debates and attempts to form federal legislation that will make electricity deregulation uniform across the country instead of a hodgepodge of various state requirements. In addition to whether or not utilities should be guaranteed the right to recover stranded costs, another issue now drawing fire is environmental compliance and the use of renewable energy sources such as wind, solar and hydroelectricity.

Current law requires utilities to buy energy from facilities that use renewable energy or cogeneration (a combination of electricity and steam). Utilities want to avoid the high costs of environmental compliance that would ensue with competition. Environmentalists want to ensure a cleaner environment and fear losing ground if standards are lowered to compensate for high compliance costs.

"It's not going to be an easy area to legislate because you've got lots of questions about what constitutes 'green'," says Mr. Moser. "It's very subjective as to what's the best thing to do to reduce emissions."

Now and the Future

DESC currently has two electricity contracts with suppliers in deregulated states—New Energy Ventures in California and PP&L Energy Plus in Pennsylvania. Cost savings for the commodity portion of the electricity bill average 1.4 percent for the California contract and 15 percent for the Pennsylvania contract. Basic Agreements are in place with nine suppliers. In May and June, DESC issued solicitations for New Jersey, Pennsylvania and Illinois to supply electricity for DoD and DoE facilities.

How DESC will establish itself in the electricity market remains a vision on the horizon. Unlike its fuel mission, DESC's foray into electricity procurement requires marketing and competition with other service providers angling for a presence in the deregulating utility arena.

But more is at stake than new business. Because electricity and natural gas deregulation and procurement programs bear fundamental similarities, customers tend to buy both commodities from the same contractor. So procurers of natural gas need to establish themselves as buyers and sellers of electricity if they don't want to risk losing their foothold in the natural gas arena.

"Convergence, or adding together the two commodities, creates synergy," points out Mr. Moser.

And synergy is what drives DESC's expansion from a fuel business to providing and managing more kinds of efficient and economical energy. Just how far that expansion reaches remains to be seen.★

DESC Awards Government's Largest Energy Saving Performance Contract

Source: Pepco/DESC

The Defense Energy Support Center (DESC) awarded the federal government's largest Energy Saving Performance Contract (ESPC) at a June 29 informal signing ceremony at Ft. Belvoir.

President Clinton announced June 3 that the Department of Defense would award the landmark contract to Pepco Energy Services and Viron Energy Services. Pepco Energy Services is a subsidiary of Potomac Electric Power Co., Washington, DC, and Viron Energy Services is a subsidiary of York International Corp., York, Pennsylvania.

The contract provides for Viron/Pepco to invest approximately $67 million in upgrades and retrofits into the aging utility infrastructure of five Army posts in the Military District of Washington (MDW): Fort George G. Meade in Maryland; Fort Myer, Fort Belvoir and Fort A.P. Hill in Virginia; and Fort Lesley J. McNair in Washington, DC.

Energy-saving performance contracts (ESPCs) are innovative financing mechanisms that leverage private-sector investment and expertise to accomplish energy- and cost-saving projects in federal facilities at no net cost to taxpayers. Under ESPC authority, federal agencies contract with private energy-service companies to audit facilities, propose energy-saving retrofits, and privately finance, install and maintain retrofits. There are no up-front payments by the government, and Pepco Energy Services and Viron will be paid from a share of the MDW savings.

DESC Contracting Officer Bruce Blank made the award official when he signed the multimillion dollar award at his Ft. Belvoir office. The formal ceremony took place on July 20.

The 18-year contract administered by DESC will realize approximately $214 million in overall cost savings.

How Does It Work?

Viron/Pepco analyzed the energy plants and facilities of the bases to be covered in the ESPC. They determined what aging, inefficient systems needed to be replaced and estimated how much money these Energy Conservation Measures (ECMs) would save.

The contractor's proposal stated that they would pay approximately $67 million for all upgrades and retrofits, with no up-front cost to the government. The government will reimburse Viron/Pepco for its equipment investment and subsequent operation and maintenance through cost savings based on the dollar difference between the original energy costs, before implementation of the ECMs, and the lower energy costs resulting from Viron/Pepco's installation of energy efficient equipment over the 18-year life of the contract. The contractor takes the risk that these ECMs will save enough money to recoup its costs and make a profit.

DESC and Viron/Pepco estimate that the ECMs the contractor will put in place will save approximately

DESC and Viron/Pepco estimate that the energy conservation measures that the contractor will put in place will save approximately $4.1 million per year in energy costs.

Bruce Blank, contracting officer in the Alternative Fuels Commodity Business Unit, signs the government's largest Energy Saving Performance Contract on June 29. Cost-savings to the government in energy usage over the 18-year life of the contract are estimated at more than $200 million.

$4.1 million dollars per year in energy costs.

Viron/Pepco will invest its $67 million over the first 30 months of the contract to make extensive upgrades to various buildings at the five installations.

According to DESC's Bruce Blank, the savings will be generated from the installation of energy efficient equipment and through Viron/Pepco maintenance of all installed equipment.

"MDW will see savings on utility bills," explains Blank. Less electricity, gas and water use means less money spent for these commodities. "Also," he states, "the contractor will be responsible for operating and maintaining all the equipment they install."

The ecological benefits are significant as well. The five MDW bases will use 88 million less kWh of electricity each year; 599,000 less MMBTUs of natural gas, and 50 million less gallons of water. This will reduce over 86,000 metric tons of harmful emissions pumped into the atmosphere.

The energy-saving measures will cover a wide range of technologies, including lighting, building automation systems, chillers, controls, HVAC, boilers and water conservation. Some of the more prominent energy-saving measures will include:

◆ *Lighting:* Some 142,600 light fixtures will be replaced or retrofitted in 714 buildings, reducing energy consumption by 29.8 million kWh, saving $1.4 million annually and reducing greenhouse gas emissions by 4,800 MTCE.

◆ *Cooling system retrofits:* A total of 888 cooling units will be replaced or retrofitted, cutting energy use in 343 buildings and reducing associated energy costs by over $1 million annually.

◆ *Air handling units:* Replacement and retrofitting of air handling units in 126 buildings will reduce energy consumption by 14 million kWh. This will mean annual savings of $742,000 and 3,500 MTCE of greenhouse gas emissions avoided each year.

◆ *Central heating plant upgrade:* Two central steam plants will be replaced with new gas-fired boilers, avoiding fuel use of 138,000 MMBTU and saving $655,000 annually.

◆ *Central cooling plant upgrade:* A new absorption chiller and chilled-water distribution line will be installed at one site, saving approximately 270,000 kWh and $21,000 annually.

◆ *Water conservation:* Water consumption and wastewater will be reduced in 213 buildings through replacement of existing plumbing equipment with ultra-low-flow units, saving approximately 50.5 million gallons of water annually, or $195,000 in costs for water.

"Energy-saving performance contracts illustrate how the federal and private sectors can create innovative solutions that will achieve significant savings for taxpayers and federal agencies," said Ed Bayberry, president and chief executive officer of Pepco Energy Services. "We are excited that area military bases will soon be benefiting from our proven experience in helping customers, both governmental and commercial, make the right energy decisions."

"We are extremely pleased with this significant government contract, and so is our partner, Pepco Energy Services," added John Mahoney, president of Viron Energy Services. "We are committed to ensuring that the U.S. government and Military District of Washington receive the best value for their investment over the life of the contract."★

Electricity Deregulation Status by State

States w/ Enacted Electricity Restructuring Laws

Arizona	Phase in: 1999
California	Full Access: April 1998
Connecticut	Phase-in: 2000
Delaware	Phase-in: 1999
Illinois	Phase-in:1999
Maine	Full Access:Mar 2000
Maryland	Phase-in: 2000
Massachusetts	Full access:Mar 1998
Montana	Phase-in:July 1998
Nevada	Full Access:2000
New Hampshire	Full Access:1998, delayed
New Jersey	Phase-in:1999
Oklahoma	Full Access:July 2002
Pennslyvania	Phase-in:Jan 1999
Rhode Island	Phase-in:July 1997
Virginia	Full Access:Jan 2004

States w/Restructuring Orders (w/o Law)

Michigan	Phase-in:1999
New York	Phase-in:1998
Vermont	Full Access:1998, delayed

States with Proposed/ Pending Laws or Orders

Alabama	Minnesota
Colorado	Mississippi
Georgia	Missouri
Hawaii	Ohio
Idaho	Oregon
Indiana	South Carolina
Kansas	Washington
Louisiana	Wisconsin

Restructuring Under Study

Alaska	North Dakota
Arkansas	Tennessee
Iowa	Texas
Kentucky	Utah
Nebraska	West Virginia
New Mexico	Wyoming
North Carolina	

Little or No Activity

District of Columbia
Florida
South Dakota

Back to the Basics—FAS 101

Source: Fuels Automated System Program Management Office

What is FAS?

FAS is the Fuels Automated System. It is divided into two parts: base level and enterprise level. At the base level, the system uses the Coggins Fuels Manager and Fuels Control Center at 300 installations to allow the Military Services to efficiently process fuel transactions. Those transactions are transmitted to the enterprise level, where Oracle Energy Downstream (OED) and Oracle Federal Government Financials will allow users to complete their transactions.

OED was developed by British Petroleum (BP) and is used by BP to run its worldwide oil business in Europe, Asia and the United States. BP then sold the software to Oracle and DESC purchased a license to use it from Oracle. The OED software was designed to work with Oracle Financials.

What are some of the goals of FAS?

We are trying to eliminate paper records and make it easy to use the FAS system to run the day-to-day operations. We are designing a system for all of our business areas, making it easy for data entry at the source and entering records only once into the system. Our primary goal is to have a system that will carry DESC into the next century, taking advantage of state-of-the-art technology and best commercial practices.

How do the Services use the FAS base level system?

The Coggins system allows users to manage refueling of aircraft on the flight line. For example, when a plane needs refueling, that request for fuel is logged into the system. The dispatcher uses the system to determine which refueling truck and driver to send. The dispatcher then records the quantity and type of fuel delivered to the aircraft. This transaction gets processed as a sale out of DESC's inventory. At the tank farm on the base, the operators use the system to view the level of fuel in the tank and to record receipts in and transfers out of inventory.

Which transactions are processed at the FAS enterprise level?

DESC will use OED to run the day-to-day operations of obtaining fuel from contractors, transporting fuel, recording it as inventory, transferring fuel between stock points, and selling fuel to customers. For example, the contract data will be in OED. We will use OED to order fuel from a contractor, record the receipt, and eventually pay the supplier. When moving fuel between stock points, OED can be used to plan all fuel transfers from a location and trigger resupply decisions. Transportation associated with fuel movements will be performed in OED. OED will also provide timely inventory and cost data. The Oracle Financials portion of the FAS Enterprise System will record all accounting data associated with those transactions such as payments to contractors, recording obligations and recording sales.

Which DESC programs will use FAS?

OED was designed to handle all petroleum products. Therefore, the Posts, Camps and Stations (PC&S), into-plane, bulk and bunkers programs are an excellent fit with OED. We expect to use OED for "non-oily" contracts such as storage and environmental service contracts, but we have more analysis to do in this area. We are also exploring whether we can use OED for natural gas, coal and electricity.

Will quality data be included in FAS? What is LIMS and will it be part of FAS?

Some product quality data will be included as part of FAS. The quality data in FAS will be limited to base level quality information. Base level quality data will be reported up from the base level system and stored in a single data warehouse, but not processed through OED at the enterprise level.

LIMS stands for *Laboratory Information Management System*, a software product used by the Air Force. The DoD fuels community is attempting to standardize to a single LIMS software to improve communication between DoD area labs, its customers and the program managers. An LIMS process action team composed of Air Force, Navy, Army and DESC personnel is looking into this issue. The central data

repository for the DoD LIMS will be one part of an integrated quality system linking fuel quality from manufacturer to consumption. JP8, JP5 and F76 origin data is now consolidated into a stand alone database called Petroleum Quality Information System. Quality surveillance test data from depot labs and commercial laboratories will be added to complete the quality loop. All quality information will then be tied or linked together in a central data warehouse. While the total quality system will not be imbedded in the FAS/OED system, we are hopeful that links will enable us to use the quality information with all other information in the fuel systems.

Will facilities data be included in FAS?

Facilities data will be collected through the Facility Automated Management System that is managed by DESC's Facilities and Distribution CBU. This system will report and maintain real-time fuel facilities data that is Internet accessible. Data will include fuel facilities' capabilities and operations such as tracking equipment maintenance status, project planning and scheduling repairs. Authorized users will be able to read, query, and directly update their information via the Web.

Will FAS be used to award contracts?

No. Contracting personnel will continue to use the Requirements Manager (RM), the Bid Evaluation Model (BEM), and eventually the Standard Procurement System (SPS) when it is fielded. The FAS system will process transactions after the contracts are awarded but will not be used to handle pre-award functions. Eventually, we want to feed data directly from RM/BEM into FAS but these systems are not considered part of FAS.

Does FAS include AirCard and Magstrip?

No. The AirCard and Magstrip are used to collect data at the point of sale. The Direct Delivery CBU initiated both the AirCard and Magstrip programs and coordinated them with the FAS program office. These card systems are a key component in getting timely data into FAS. When FAS is implemented, these card systems will interface with FAS seamlessly.

What is PORTS and how will it work with FAS?

PORTS is the *Paperless Ordering and Receipt Transaction Screen* for the PC&S program. It is designed to work with the Requirements Manager and feed data into the Defense Fuel Automated Management System. With PORTS, a base uses the Web to order fuel directly online. After fuel delivery, the contractor can enter its receipts into PORTS and have those receipts serve as the invoice. The base then confirms the fuel delivery data online and the contractor is paid. We will have some version of PORTS for FAS. All programs will be able to use this data entry method.

What part of FAS is complete?

At the base level, the Coggins systems are deployed at 300 locations and used by the Military Services for their day-to-day operations. The bunkers program is using the Oracle Financials to run its business.

How does the bunkers program fit into the picture?

We started using Oracle Financials to process bunkers transactions on May 3, 1999. By doing so, we proved that the government could use a commercial off-the-shelf (COTS) financial package to manage its finances. However, the bunkers program is designed to work with standard Oracle software modules such as purchasing, inventory and order entry, not OED.

Since oil-specific software was not on the market when we started FAS, we had to modify the software to handle the oil-specific aspects of the business such as price escalation. Since OED handles all aspects of the business and we want all of our programs to use the same software, we will move the bunkers program into the OED software.

How important is FAS to DESC?

Implementing FAS means that DESC will have a single source of master data. The data will be more understandable, more accessible and more timely. For example, the management information portion of the system will provide inventory managers the ability to query the system for stock availability by product per location or aggregated geographically. Ordering offices can determine the amount of product left on contract, and see any planned orders against contract assets. We can examine consumption data by product or Service. The optimization branch can easily determine the actual cost of moving a particular barrel of fuel at any location worldwide. The COTS software was built with the needs of oil businesses in mind and will provide DESC the ability to adopt commercial practices. We will have better tools for improved decision making for resupply and distribution.

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Fuels Automated System

Basic FAS 101. . .
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What will FAS mean to our customers, the Military Services?

Our customers will have a more convenient way to do business and report their transactions to us. This could be via the Coggins base level system, or via Web access or dial-up access to OED. They will have better service and better billing and accounting information as well as access to the same management information system used by DESC. To make FAS work well, we need our customers to report their transactions to us on a timely basis.

What will FAS mean to our suppliers?

With FAS, our suppliers will be able to key delivery data into OED and to eliminate paper forms. By eliminating paper and EDI invoices, we will be able to pay suppliers based upon the receipt and pricing data in our system. In the bulk program, suppliers will be able to use OED to enter transportation data and eliminate government transportation documents.

Although we will not make all of these business changes the minute we start using FAS, we will be able to adopt these commercial practices soon thereafter.We are building upon the concepts of PORTS first developed by the Direct Delivery CBU.

What is the schedule for implementing the FAS Enterprise System?

The bulk fuels program is first and will be divided into three phases: 1) Rocky Mountains and West Coast, including Alaska and Hawaii; 2) Inland and East Gulf; 3) OCONUS subdivided into Europe and Asia. We are targeting the Salt Lake City area as a pilot to test the entire system, with a "go live" date in late 1999. Due to concerns associated with Y2K for all systems, we will not deploy the rest of the first phase of bulk until around February 2000. Then we will implement each additional phase within three to four months of each other.

As we judge the success of the bulk fuels implementation, we will schedule the other buying programs. The complete schedule has not been firmed up, but all programs should be in the system before the end of calendar year 2000.

We are targeting the Salt Lake City area as a pilot to test the entire system, with a "go live" date in late 1999.

Why was bulk fuels selected to go first?

We recognized that the bulk fuels program could benefit the most from having timely data and a better system to manage the contracts, inventories and transportation. Bulk fuels is also the most complex program because of its worldwide scope, the number of locations and the system interfaces. Success in the bulk program means we could handle the other fuel programs easily.

When do I stop using DFAMS?

We will first test any program with a parallel run of FAS and the existing Coggins/DADS/Telnet to DFAMS process. After we are satisfied that FAS can process a day's business in a day, we will "turn off" DFAMS and use FAS to conduct our day-to-day business for that particular phase or program. For example, during the first phase of the bulk implementation, we will use FAS for the Rocky Mountains and West Coast and use DFAMS for the remainder of the bulk program. We will have to use two systems until we can migrate all programs into FAS and turn off DFAMS completely.

How will FAS evolve over the next five years?

To begin with in FAS, we will conduct business as we know it today with the existing bulk and PC&S business structure. However, shortly after FAS is fully operational, we will undertake two business process changes that will complete the Integrated Materiel Management mandate. We will be able to bill to our end use customers and allow the Military Services to eliminate their Service stock funds.

We will also be able to capitalize fuel at the designated PC&S locations. In addition, we will add more point of sale devices to capture data at the base level and interface with automation at our fuel terminals.

During the next several years, FAS will allow us to move to a paperless environment, make data readily accessible to the end user, continually improve the system and adopt commercial practices.

If you have any further questions about FAS, please e-mail them to the FAS Program Management Office at *FAS@desc.dla.mil*. ★

The FAS Enterprise Test Team—Hard at Work Playing in the Sandbox

By Kay Bushman, Program Manager, FAS Enterprise

Since October 1998, more than 20 representatives from the Defense Energy Support Center's commodity business units and regions, and Air Force Missile Fuels have been working together as the Fuels Automated System (FAS) Test Team to configure and test a software product, Oracle Energy Downstream (OED). DESC purchased this product to complete the supply and distribution piece of FAS. British Petroleum developed the OED software and has used it since 1992 for business worldwide. British Petroleum sold it to Oracle in 1997. The FAS Test Team is primarily working on issues related to the enterprise level.

The FAS Test Team has organized itself into subgroups. Greg Andrilenas, Chris Barnett, Lori Bovee, Keith Pladson, Leslie Rathell, Kim Schooley, John Roundy and Barbara Todd handle bulk processes. Direct delivery issues are assigned to Wendy Bridges, Leslie Brunner, Bill Martin and Melissa Gill. Stock reconciliation belongs to Jane Hermani and Greg Dreffein. Walt Hermani, Mike Earp and Jean Kashmer, along with Mike Dezsi from DFAS, work the accounting issues. Charlene Smoot and Selvin Rex from Air Force Missile Fuels work on both subgroups because they have both types of processes. As the project progresses, Missile Fuels traffic management specialists will join the team to bring their unique transportation skills to this effort.

Senior managers at DESC, the "Gang of Six," have given the FAS Test Team a big responsibility. The team's main task is to figure out the best use of the native functionality in the Commercial–Off–The–Shelf OED software to run the business. The Test Team also has the opportunity to identify business process improvements that the software may offer. Other employees in the CBUs are expected to actively consider any new ideas the FAS Test Team proposes. As a last resort, the team can recommend that changes be made to the software if it doesn't meet specific business requirements. The Gang of Six then decides whether to authorize those changes.

Day to day, the FAS Test Team works with the Oracle consultants on site in the "Sandbox"—the nickname for the FAS Test Room where the OED environment is installed with data based on our fuel contracts, stock points, customers and users. John Roundy has taken the lead in identifying DESC data needed to set up the software.

The Test Team defined the business scenarios and started testing the software. The test strategy will mimic the Salt Lake City area and obtain actual data from contracts, orders, receipts, issues and sales plus the associated transportation in the closed test environment. Greg Andrilenas has established a contract framework, the template for all bulk contracts. Chris Barnett, an FAS analyst from the Bulk Fuels CBU, wrote the first detailed test script that will enable efficient testing of the software.

The Test Team continues to grapple with business issues that arise during analysis and testing. For example, Keith Pladson and Barbara Todd are working on how to handle some of DESC's transportation processes. How do we set up transportation tenders in the system? What is the best way to handle truck transportation? Missile Fuels representatives Selvin Rex and Charlene Smoot take turns coming up from San Antonio. As Mr. Rex joked, "When your current system is Microsoft Office, you have a lot of learning to do with a system like OED." Meanwhile, Wendy Bridges is working on how to handle barge grids for bunkers and tiered pricing. Jane Hermani is working to understand the OED process of stock reconciliation. Through the efforts of all the Test Team members, questions like those above will be explored and discussed in order to identify the best fit in OED for the unique aspects of our business.

Maj. Kim Schooley, an Air Force reservist from DESC-Ft. Dix and now assigned to bulk fuels, talked about the principles underlying the project. "One of the main drivers is the ability to enter data at the source of the transaction. This will mean some type of access for DESC personnel, Regions, storage terminals, bases where Coggins is not installed, and even for suppliers. By entering data at the source, we expect that the data will be more timely and accurate." Chris Barnett continued, "This, in turn, will give DESC the greatest benefits of

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Legally Speaking

Privatizing DoD Utilities

By Robert A. Burton

The Department of Defense (DoD) recently initiated an ambitious program to privatize its utility systems. The privatization effort is part of a series of defense acquisition reform initiatives designed to eliminate unnecessary infrastructure, streamline resources and utilize innovative business approaches. DESC is partnering with the Military Departments and industry to achieve DoD's privatization goals. This article provides an overview of the DoD reform initiatives in the privatization area and discusses some of the legal issues and challenges DESC and the Military Departments face as they address utility privatization.

DoD Utility Privatization

DoD utility systems provide the electricity, water, natural gas, steam and wastewater treatment critical to the operation of military installations. Currently, DoD spends over $2 billion each year on its energy-related facilities. Many of these systems are antiquated and need substantial repairs. Although the financial resources required to adequately modernize the systems far exceed DoD's current and projected funding levels, other public and private entities have the necessary resources. Consequently, DoD plans to transfer its utility systems to non-federal entities, dependent on an analysis of mission readiness requirements and cost benefits.

DESC's expanded role in the privatization process is directly related to Defense Reform Initiative Directive #9, dated December 10, 1997. This directive requires that the Military Departments develop a plan to privatize all utility systems

(electric, water, wastewater and natural gas) by January 1, 2000, unless the systems are needed for unique security reasons or the privatization efforts would be uneconomical. However, as a result of the complex issues associated with DoD's privatization efforts, the Deputy Secretary of Defense extended the date for privatizing DoD utility systems to September 30, 2003.

Statutory Authority

The privatization of DoD utility systems is based on the statutory authority in United States Code (U.S.C.), Title 10, Section 2688. The law, which was included in the 1998 National Defense Authorization Act, allows the secretaries of the Military Departments to convey DoD utility systems, including electricity, water, wastewater, and natural gas, to any "municipal, private, regional, district, or cooperative utility company or other entity." Prior to the passage of this law, DoD had to obtain the express approval of Congress to privatize utilities on a case-by-case basis. The legislative purpose of Section 2688 is to get DoD out of the business of owning, managing, and operating utility systems (infrastructure) by privatizing them. Detailed guidance regarding the implementation of 10 U.S.C. Section 2688 was included in Defense Reform Initiative Directive #49, dated December 23, 1998.

DESC's Role

In addition to providing detailed guidance on utility privatization, Defense Reform Initiative Directive #49 encouraged the Military Departments to use innovative business practices and to work with DESC in implementing their utility privatization plans. DESC provides "one face to industry" for DoD utility privatizations. As such, the Center can facilitate the development of standard formats for requests for proposals (RFPs) and uniform contract terms for privatization transactions that apply to all Services. Although local laws and circumstances will undoubtedly influence the contract terms, there is a need for consistent wording of some of the more significant contract provisions, such as those governing contract termination.

DESC also provides centralized negotiation support to the base

contracting officers, who may not have experience negotiating complicated utility privatization contracts. This approach ensures that DoD has uniform negotiation strategies and procedures in place for its utility privatization contracts.

Emerging Legal Issues

DESC and the Military Departments are confronted with several emerging legal issues related to the privatization of DoD utility systems. One of the most challenging issues is how to reconcile federal statutes requiring competition with state laws and regulations that give utilities the exclusive right to provide services within a specific area of a state. These areas are usually referred to as "certificated service franchise territories." When a state public utility commission certifies a franchise territory, it is basically approving a sole source or monopoly for the provision of utility services within certain geographic boundaries. Thus, it is unclear how the competition requirements of 10 U.S.C. Section 2688 and the Competition in Contracting Act (CICA) will impact a DoD utility privatization when there is a state-approved sole source. For example, Section 2688 requires the use of competitive procedures if more than one utility or entity expresses an interest in a proposed DoD utility conveyance. However, it is arguable that only one utility is qualified to express an interest when there is an exclusive state-franchised utility. The problem of reconciling the applicable state and federal laws is particularly difficult when a privatization involves electric utilities because so many states grant exclusive franchises for the distribution of electric services.

Some commentators and DoD have identified the 10-year statutory limitation on utility service contracts as another legal issue that impacts privatization. 10 U.S.C. Section 481 limits the maximum term of a government contract for utility services to 10 years. Consequently, an entity that acquires a DoD utility

will want to fully amortize any capital improvements it makes to the utility during this 10-year period. As a result, DoD will face higher utility service costs during the life of the contract. DoD would prefer to pay the capital improvement costs over 20 or 30 years in order to keep utility service costs as low as possible for a longer period of time. Furthermore, the standard industry practice is to amortize costs of this nature over a 20- or 30-year period. In most cases, DoD utility systems will require significant repairs and modernization after privatization and an acquiring entity's capital improvement costs could be substantial. A 20- or 30-year contract period would clearly facilitate utility privatizations by allowing for a longer amortization period.

The 10-year contract period poses a particularly difficult challenge for DoD contracting officers who negotiate privatization agreements. In some cases, contracting officers may try to compensate for the 10-year contract term by agreeing in advance to pay for unamortized capital investments at contact completion, provided a pre-negotiated termination schedule is included in the privatization agreement. In the final analysis, however, the best solution may be legislation that allows for longer-term utility service contracts.

Another potential obstacle to privatization is the current tax treatment of conveyances of gas and electric utility systems. Under Section 118(b) of the Internal Revenue Code, referred to as the "Contribution in Aid of Construction (CIAC)" provision, conveyances of property to a provider of utility services by a customer or potential customer are generally taxable as gross income to the service provider. The legislative history of Section 118(b) indicates that Congress viewed a utility conveyance as a taxable transaction if the conveyance was part of an arrangement to encourage the provision of utility services for the benefit of the entity transferring the assets. Thus, DoD utility privatizations appear to fall within the scope of Section 118(b), and the acquiring entity would be taxed on the fair market value of the transferred assets.

DoD is concerned that the taxable nature of the conveyances may act as an impediment to utility privatization. The acquiring entity will undoubtedly include the cost of the tax in the utility service rates it offers to DoD. This additional cost could make the proposed privatization uneconomical and, therefore, DoD would be prohibited from pursuing it. Some form of tax relief may be needed to alleviate this problem.

In Defense Reform Initiative Directive #49, the undersecretary of Defense (acquisition and technology) was directed to work with the Military Departments to determine if DoD should propose legislation to obtain relief from the

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POLEX—Odyssey at Fort Dix

By Claire McIntyre

For two weeks each year, Army reservists from the 475th Quartermaster Group join forces with the Defense Energy Support Center (DESC) to train in transporting fuel from one location to another—a function normally carried out by government contractors. This training exercise, called POLEX (Petroleum, Oils and Lubricants Exercise), gives reservists the opportunity to gain first-hand experience in transporting fuel during peacetime in preparation for real-life war conditions while DESC saves money for fuel delivered without cost.

Myriad technical and tactical factors make for successful transportation. Although usually delivered by pipeline and commercial tank trucks, fuel is delivered by U.S. Army Reserve tank truck companies during POLEX in preparation for emergencies or high demand requiring an alternate mode of delivery. U.S. Army Reservists practice transporting petroleum between fuel terminals, or Defense Fuel Support Points, as well as from terminals to military installations and field operations. When asked what impresses them most about the exercise, reservists invariably point to the value of hands-on experience in gaining the skills necessary for service during an actual military action.

Col. Frank Wright, USA, commander of DESC-Americas, whose area of responsibility includes the continental United States, Canada, Central and South America, Greenland, Iceland and the Azore Islands, spent two days observing 1999 POLEX operations at Fort Dix, New Jersey. "I know that there's nothing more beneficial than loading and unloading those trucks. We'll do anything we can to provide the reservists with the opportunity." He was joined by Lt. Col. David Witwer, USAF, commander of DESC-Fort Dix, in a VIP Humvee procession to Reserve bivouac, or camp, sites.

With U.S. Army Reserve Maj. Gen. Rodney Ruddock, commander of the 99th RSC and a high school principal, in the lead, the convoy made its way through the winding dirt roads leading to the camp sites. Humvees ride hard and powerfully with a great expanse of windshield to provide excellent visibility from both the front and back seats. Side windows made of flexible plastic zip along the perimeter, in effect collapsing open. The tank-like vehicles vary on such features as number of doors, hard or canvass tops and number of antennas. Whether they carry passengers or haul weaponry, the Humvees are a common site at Fort Dix on any type of terrain.

The bivouac sites consist of encampment tents covered by camouflage netting that mimics surrounding forestation to provide protection from aircraft fly-overs. Tents provide living quarters for the reservists as well as serving as command centers and maintenance and supply storage. Such "bare-base" facilities are also distinguished by the fuel equipment—hoses, fuel pumps, earth-movers and raised landscaping, or berms.

In their preparations to receive fuel from truck tanks, reservists join large canvass hoses together that rest on padding at the connections to prevent environmental ground contamination in the event of leaks. Huge berms, some newly-created, some already in existence before the POLEX exercise, serve as platforms for enormous 50,000-gallon fuel bladders. The berms, as well as berm liners, also provide protection from any leaks or spillage. At some sites, bulldozers plow the earth to form new berms as bladders and hoses are installed a stone's throw away.

"This is the only way we can prepare for a wartime mission—by hands-on experience," said Sgt. 1st Class Jerry Burgess of the 828th Quartermaster Company. Other reservists report that improvement in the participants' skills can be

witnessed on a daily basis. Briefers generally report only minor problems—a small, corrected leak here or there, a few sick calls due to ticks.

"The strength of POLEX has been the growth that it's had," said Gen. Ruddock. But he advocates greater allocation of resources and participation to the exercise. "We should beef-up POLEX and increase awareness and recognition of the exercise so the 475th can strengthen exercise mission readiness."

DESC-Fort Dix Commander, Lt. Col. David Witwer, USAF, left, and DESC-Americas Commander, Col. Frank Wright, USA, right, discuss POLEX field activities with Capt. Michael Cunningham, USA, of the 2nd Battalion, 309th Infantry, 78th Division.

Clearly enthusiastic proponents of POLEX, Cols. Wright and Witwer let no aspect of the sites go unnoticed. Pointing to a large canvas pouch perched on a tripod structure, Col. Witwer explains the purpose behind the "emergency wash." "If fuel gets in someone's eyes or on their skin," he says, "they can go to the emergency water pouch and rinse it off immediately."

Col. Wright points out the relatively shallow yet long boxes that rest close to tree clumps. "They're called 'coffins'," he says. "They hold all the fuel equipment when it's not in use." At another camp, both colonels turn their attention skyward to the air traffic, identifying aircraft from KC-135s to C-141s and KC-10s, the latter's identity given away by its three engines.

A lunch break consists of an MRE (Meal, Ready-To-Eat), the modern version of C Rations. Seated in a large circle within a tent, reservists and officers plumb the mysteries of the food package, each one containing a different menu. As an example, Menu No. 7 contains chicken with salsa, a shortbread cookie, crackers, peanut butter, cocoa beverage powder, M&Ms, a small assortment of condiments, and matches. Each element of the meal is sealed in a plastic pouch. The main course can be heated by submerging it in another pouch containing a heating element. Just add water and wait. When the group begins to disband, Col. Wright offers his fellow diners caramels from his MRE.

Staging of wartime conditions becomes particularly evident with two reservists holding M-16 rifles. Electronic devices on the weapons and sensors on their helmets and shoulder straps allow them to fire at each other without harm, yet with a means to determine "hits" and "misses." A beep signifies a hit in the military version of "laser tag." In the transportation of fuel, all events, including enemy fire, must be taken into account.

One of the armed men, Sgt. 1st Class Frank E. Hummel, switches gears and heads off to an M931A fuel truck—the truck that hauls fuel during POLEX to bivouac sites and between fuel terminals. The five-ton tractor hauls a 969A1 tanker with a 5,000-gallon fuel capacity. He explains that the tires inflate or deflate according to the terrain, a process programmed by the sergeant with the push of a dashboard button. Traveling over sand requires a different traction than traversing over a highway, so if the tire air pressure is not adjusted properly, the vehicle can get stuck or flip over. And with 5,000 gallons of petroleum in the tank, the consequences could be deadly.

As the truck slowly pulls out of the compound, a sentry emerges from a fox hole to acknowledge the truck's driver, only to disappear back underground with the truck's departure. As standard practice, guards and drivers exchange a series of code words when vehicles approach a training site.

"Most people don't know that 60 percent of the fatalities in Desert Storm were due to vehicle accidents," said Sgt. Hummel, now

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POLEX '99

Staff Sgt. Matthew Rehrig, left, and Sgt. 1st Class Jerry Burgess of the 828th Quartermaster Company check hose connections in preparation for fuel delivery at a bivouac site.

POLEX 1999 Statistics

The following national figures relate to JP8 jet fuel delivered by Army reservists from the 475th Quartermaster Group across the United States during the POLEX exercise.

Miles Driven: 206,679

Gallons of JP8 Delivered: 7,181,000

Participating Defense Fuel Support Points (vendors)—Ludlow, MA; Verona, NY; Jacksonville, NJ; Port Mahon, DE; Baltimore, MD; Yorktown, VA; Wood River, IL; Grand Forks, ND; Manchester, WA; Charleston, SC; Macon, GA; Moundville, AL; Craney Island, VA; Carteret, NJ

Number of customers receiving fuel: 50 military installations

1999 figures are up slightly from 1998, both in miles traveled and gallons of fuel delivered. Figures are also down slightly from projected figures due to deployment of personnel and fuel to Kosovo.

Reservists also transported an additional 350,000 gallons of marine diesel fuel for training purposes only.

Other Points of Interest

POLEX began in 1981; DESC's involvement started in 1986.

During the 1998 POLEX exercise, a lightning strike temporarily halted the flow of fuel through the Defense Fuel Support Point Jacksonville transfer line from the pier to the terminal at a point three miles west of the fuel terminal. While the line was out of service to find and repair the leak, U.S. Army reservists participating in the POLEX exercise delivered 376,000 gallons of fuel from Defense Fuel Support Point Port Mahon, DE, to Jacksonville's biggest customer, McGuire AFB, NJ.

Fueling at Jacksonville

John Gaughan and the View from the Top

By Claire McIntyre

As part of the Defense Energy Support Center's POLEX exercise, Army fuel truck convoys roll into New Jersey's Defense Fuel Support Point Jacksonville, a contractor-owned, contractor-operated fuel terminal located eight miles from Fort Dix. Here, reservists load trucks with JP8 fuel and proceed to military activities in Delaware, New Jersey and Pennsylvania. McGuire Air Force Base, co-located with Fort Dix, is DFSP Jacksonville's closest stop and its largest customer.

John Gaughan, DESC-Fort Dix assistant quality manager and quality surveillance representative for DFSP Jacksonville, doesn't just like his work. He *loves* his work.

Surrounded by 96,000-barrel storage tanks and 7,400-gallon fuel trucks, he invites visitors to get close to the action. Explaining that the reservist perched on top of the fuel truck can check the level of the fuel from a small hatch opening in the tank, he asks, "Want to climb on top?" Sure enough, the view from the top reveals the liquid's level as reservists check hose connections below. The climb down is harder than the climb up—it has to be done backward.

"You can get some great pictures from the top of that tank," he says pointing to one of the storage tanks with a long, winding staircase. "Want to climb to the top?" he asks. The trek is exhilarating and indeed the view offers a panorama of reservists and fuel trucks waiting to fuel and depart in a convoy formation. A subsequent trip to Defense Fuel Support Point Carteret revealed the inside of a drained storage tank built in 1933. With an approximate height of 50 feet, the interior was strangely reminiscent of a cathedral. Steel support beams extend from floor to ceiling. Wall and floor surfaces artistically swirl between brown and tan coloring from years of interaction between liquid and rust.

John Gaughan

Participants of POLEX '99 fuel up at the Jacksonville terminal. Reservists formed a convoy to deliver the fuel to various locations along the East Coast.

Jacksonville receives about two million barrels of fuel each year from barge deliveries seven miles away in Burlington. About seven times each month, fuel pumps from the barge through a pipeline to DFSP Jacksonville for 13 1/2 hours at a time. About 160-200 trucks load fuel from the Jacksonville terminal each month. McGuire, Jacksonville's biggest customer, receives fuel from Jacksonville via pipeline.

As a quality surveillance representative, Mr. Gaughan conducts on-site laboratory tests on fuel samples received at Jacksonville. Surrounded by test tubes, Bunsen

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Jacksonville. . .
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burners, ovens, chemicals, and other lab paraphernalia, he runs a variety of tests to check for fuel contamination. Every time fuel moves from one location to another, he explains, it's tested again. "Moving through a pipeline, for example, fuel can be corrupted with gasoline residue," he said. "Long-term storage can also cause contamination." Most problems are detected through the filtration system phase of the testing. Military specification fuel must also pass a flashpoint test—in this case, the JP8 flashpoint is 118-120 degrees, well in excess of the 100-degree flashpoint minimum requirement.

The long list of B1 tests must be conducted with great caution because of the product's flammability. Another laboratory, Mr. Gaughan noted, experienced a frightening fireball when a bird's nest blocked a vent leading from the lab to the outside. "You've got to check everything," he said. The nest was built during the course of a weekend.

"Half of this job is public relations," says Mr. Gaughan. "I'm an interface between refiners and customers, so if I can catch a problem here, I can prevent trouble down the road and keep relations good between our suppliers and customers. Most of the time, people are happy to get help in catching problems before they go any further. But a lot of it has to do with the approach."

If testing and troubleshooting at the Jacksonville fuel terminal were not enough to keep him challenged, Mr. Gaughan also serves as assistant quality manager at DESC-Fort Dix, dividing his time between the two sites. He commandeers his red convertible over the single-lane roads connecting his two workplaces with the same enthusiasm that marks his discussions about fuel and quality control. As farmland passes on both sides, the sun glinting off the fenders, John Gaughan is in his element.★

Operation Provide Refuge

Kosovo Refugees Find Temporary Home at Fort Dix

In support of Operation Provide Refuge, Fort Dix opened its barracks to thousands of Kosovar refugees displaced from their homes. The operation coincided with this year's POLEX training exercise when Army reservists usually occupy the base's barracks. The reservists took advantage of the unique situation to supplement their training by bivouacking at various wooded locations throughout the base.

Fort Dix provided a temporary home for the refugees until they could be permanently placed in various cities throughout the country. Security, medical and admissions checks were made before refugees could be released into the United States.

As of June 15, 1999, approximately 2,600 refugees were living at Fort Dix. A total of 4,024 refugees had received assistance at the base—more than 1,400 had already departed, with more departures scheduled every day. On July 9, a ceremony at Fort Dix marked the end of Operation Provide Refuge and the departure of all refugees to sponsors within the United States.

Fort Dix created a "village" where the needs of the refugees could be met. Services provided included prayer rooms, English classes, medical assistance and psychological counseling, as well as cultural orientation classes about driving, shopping, working and attending school in the United States. The installation also offered refugees a swimming pool, go-cart track and miniature golf course. Although many services were available to ensure the comfort of the refugees, many were anxious to return to their homeland and begin rebuilding their lives.

Additional aid to the Kosovar refugees is provided through Joint Task Force-Open Arms, comprised of the U.S. Department of Health and Human Services, Army Reserve, Army National Guard, U.S. Department of State, 18th Army Airborne Corps, Immigration and Naturalization Service and the American Red Cross.

Legally Speaking. . .
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10-year statutory limitation on utility service contracts and the CIAC tax provision. New legislation may be the most effective way to address the problems created by the two statutes and to facilitate future utility privatizations.

Conclusion

DESC is playing a key role in the management of DoD utility privatizations and is at the forefront of acquisition reform in this area. The Center is exploring new and innovative business approaches to utility privatization and is identifying some of the emerging legal issues. DESC's goal is to standardize and streamline the privatization process and to effectively partner with the Military Departments and industry in this effort. Both DoD and industry will benefit from the Center's experiences and leadership in utility privatization. Finally, the lessons learned from the new approaches that DESC adopts will serve as a model for future DoD acquisition reform initiatives.★

Robert A. Burton has held numerous legal positions with DLA since joining the agency in 1980, including counsel to the Defense Contract Management Command (DCMC) and the DLA legal representative to the Defense Acquisition Regulations (DAR) Council. He is currently detailed as counsel to DESC. Mr. Burton is a graduate of the College of William and Mary and the University of Virginia School of Law.

Odyssey at Ft. Dix. . .
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Reservists display specially fitted M-16 rifles. The modified weapons allow reservists to obtain hands-on training safely and effectively.

steering down the dirt road at the truck's regulation maximum speed of 40 miles per hour. Humvees pass regularly from the opposite direction. "That's why what we do, transporting the fuel, and training is so important. You really need to have experience over a period of time before you can be prepared for deployment overseas. We're taking the place of contractors during POLEX and that's valuable training, because contractors aren't going to deploy. We are."

Reservists must also undertake many other tasks in the course of the fuel exercise, including water purification for drinking, food preparation and, of course, armament. Ironically, the petroleum mission is the easiest objective of POLEX, according to Col. Wright. "It's the life support aspect of the exercise that's the hardest—where the soldiers will live, how they'll eat," he says.

Extolling the benefits of the POLEX exercise, Col. Wright points to the Gulf War and the high numbers of reservists who served. "We hold about three planning sessions a year for POLEX and begin work for the next year as soon as the current exercise is over. It takes a lot of preparation," he said, estimating that about 400 people attended a planning meeting last January. "But the pay-off is excellent," says the DESC-Americas commander. "Everyone wins—the Army, DESC, our customers. With every POLEX exercise, we strengthen our ability to respond to wartime conditions and supply our Forces overseas with the fuel they need to carry out their mission."

Red flags on the edge of ranges alert thru traffic that weapons are firing. Displaced gravel from the Humvee's tires hits the side of the vehicle, making a noise uncannily similar to artillery—a last momentary, unintended simulation that takes no one by surprise.★

Up Close with. . .

Kelly Morris, Director, Direct Delivery Fuels

Kelly Morris

By Marilyn A. Miller

Ms. Colleen "Kelly" Morris is a savvy young woman who has found the right recipe for successfully combining raising a family and managing a demanding career. She is focused, confident, energetic and competent—traits that she hopes she is instilling in her two young daughters, Kristina and Karin, ages 12 and 10 respectively. Ms. Morris also shares these ideals with her husband, Robert, a civil servant who works for the Navy as the director of the Contracts Division at the Naval Surface Warfare Center in Indian Head, Maryland.

Ms. Morris was born and lived her early years in a mining camp on a mountaintop in Montana. She and her 5 brothers and sisters lived in different mining towns in the state because her father was a mining engineer/geologist and the family went with him to where his jobs took him. When asked about her childhood, Ms. Morris smiled as if she were remembering those happy times. She said, "We had a great childhood. We didn't have a lot of other playmates, so my brothers and sisters and I were our own best friends. At one point when we were living in a small town near where I was born, we attended a two-room schoolhouse. One room was for first to fifth grades; the other, for grades six to eight. When my dad got a job offer that was going to take us away from the area, the schoolhouse had to close because my brothers, sisters and I made up three-fourths of the school!"

Kelly eventually headed off to the University of Northern Colorado in Greeley where she studied biological sciences and German. When she graduated in 1982, she couldn't find a job in that field. It was a good time for Kelly and Robert to marry. He finished graduate school and joined the Navy. The Morris' moved around quite a bit before settling in California where Robert was in the Seabees. By then, Kelly had decided to try for a civil service job. "I started as a GS-3 military personnel clerk and then switched over to civilian personnel," said Morris. That was just the beginning.

Morris moved up quickly through the system with promotions to new and bigger job responsibilities. She applied for a position through a job announcement in the Professional Enhancement Program (PEP). "I got the interview call," she mused. "I didn't really want to be a contract specialist, and would have preferred to stay in the personnel field, but I went for the interview anyway. I was hired the next day. Shelby Yeakley hired me at DFSC and I have never really looked back. My degree helped me to be selected under the outstanding scholar program and to get a progressive career position from GS-7 to GS-12. I was very challenged and very interested in the field and still am today."

Ms. Morris started working at DFSC in 1988. She was assigned to Region 4 in Posts, Camps and Stations, working for Roger Morehead. She worked on Cool Barge and a lot of the programs the PC&S specialists are working today. Then she became part of a team assigned to buy crude oil for the Strategic Petroleum Reserve. That was short-lived, however, because of the Gulf War. Ms. Morris was reassigned to Natural Gas as a GS-9 working for Sharon Murphy who was her division chief at the time.

"Natural gas was a great place to work because it was a growing program and a changing environment. There were many changes taking place because of the deregulation of natural gas. We worked hard to stay up with everything. It was very exciting." Kelly knew she had found her niche.

In order to progress in the contracting field under the DAWIA rules, she had to go back to school and earn 24 hours of business credits because her undergraduate degree was in biological sciences. It wasn't easy working full time, raising two daughters and going to school at night, but she was committed. Her hard work and dedication paid off. She was selected as a contracting officer and did a lot of work putting together some of the Acquisition Reform changes. In fact, Kelly was the first person to go out and do a natural gas solicitation based on best value source selection rather than just price alone.

To progress up the management ladder, Kelly developed a career plan for her personal and professional growth and development. "I can tell you one thing," Ms. Morris said emphatically, "I never thought I'd be a GM-15. Mr. Biddle [Ed Biddle, former DFSC director of contracting] was my role model, but I *never* thought I'd be walking in his footsteps! I guess I really began making my career plan when I entered the Professional Enhancement Program. I wanted to get into a government series that would allow me to have a job if I had to move around with my husband."

She was fortunate that her husband had several tours in DC, so she was able to focus on her contracting career. Her plan to stay in contracting would also allow her to be well qualified for a contracting job almost anywhere in the world. In addition, her experience in natural gas and fuels makes her very marketable to commercial companies. There is no doubt that Ms. Morris planned well, carried out her plan and has reaped the benefits from it.

Ms. Morris commented, "Sharon [Murphy] runs things like a business. Even though we are a government entity, she views things from a business perspective. I learned that from her. We need to be sure we have a successful business. Focus on the customer. In natural gas we compete with local utility companies so we must be sure we negotiate good, competitive prices. We also spend a lot of time visiting customers and marketing our contracting services, potential savings and other benefits of doing business with us. We visited our customers and listened to what they wanted. I learned a lot from those experiences. I was also a multi-functional manager in natural gas, working both requirements as well as contracting, so I think that helped me present myself as a very well-rounded professional."

Always making careful decisions about her life and her career, Kelly knew she was ready for advancement. So, when the director of Direct Delivery Fuels position was advertised, she applied. "I only apply for jobs I really want," she said. "I felt that I had a well-rounded, multi-functional background and good, solid experience as a division chief. The opportunity was there; the time was right. I wanted to stay at DESC and saw advancement opportunities for me in either Alternative Fuels or Direct Delivery. I took pains to carefully prepare my application package and went for it."

From a cadre of excellent, well-qualified candidates, the panel selected Ms. Morris to be the new GM-15 Director of Direct Delivery Fuels. She has been in her new job about nine months. When asked if she had aspirations to become a member of the Senior Executive Service, Ms. Morris said that "down the road" she may be interested, but right now she was focusing on her CBU. Working new programs and building an employee development plan are very important to her. She also noted that being involved in fuel supply to Kosovo was an exciting challenge. She would like to expand her knowledge of the petroleum business in DESC and learn more about all the processes and programs. She added, "There is so much more to learn here that I'm not ready to move anywhere else for the near future."

Kelly Morris at home with husband Robert and daughters Kristina and Karin.

What advice would she give to employees with career aspirations? She advises, "Get a degree. Get a business degree if you don't already have one. If you have a degree, take extra business classes that will give you the background to move into a number of diverse jobs. Work hard. You will always be successful if you work hard. Next, treat people the way you would like to be treated."

All work and no play makes for a dull person. Kelly's family and the time she spends with them are very important. She doesn't get much private time, but she is very happy to spend her leisure time enjoying her children's interests in extracurricular activities. She is a volunteer basketball coach for a Pee Wee girls basketball league in the Mt. Vernon area and often assists with Girl Scouting. She enjoys reading science-oriented magazines, bird

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Fleet Card Makes Its Mark

A Year in the Life of DoD's Fuel Credit Card

By Edward A. Munns, Jr., Program Manager

One year ago, the Defense Energy Support Center took on the responsibility for the DoD Fleet Credit Card. There were some tense moments at the beginning, but the card has left its mark. More than 55,000 individual cards have been issued.

Deputy Secretary Dr. John J. Hamre selected DESC to manage the program because of our working knowledge of the fuels industry and negotiation skills. Even with this tremendous vote of confidence, getting started with a program this size had its share of problems.

Even though DESC advertised this program on its Home Page as well as through mass mailings, briefings, news articles and nationwide on-site training classes, some units didn't understand that their old Wright Express (WEX) cards had expired and tried to use them. They could apply for the new card simply by accessing the DESC Home Page and filling out the required forms.Voyager, the Fleet Card provider, distributed the cards immediately.

Another problem concerned the Voyager Card not being accepted in Puerto Rico or the Virgin Islands. U.S. Bank, the task order awardee, agreed to provide credit card services through a special account for DoD where VISA cards would be accepted. The Army Corps of Engineers and National Guard were especially satisfied because their missions often took them far from bases where gasoline and diesel are normally obtained.

Proper use of the card required some additional training for military members. To standardize procedures for DoD's ever-changing personnel, Voyager produced and distributed two videotapes. One demonstrates how a driver properly uses the card by swiping the mag-strip and entering the odometer reading and pin number to activate the pump. If the driver runs into problems, such as card rejection, instructions appear. A 24-hour, toll-free number is also listed on the back of the card if any questions arise during fueling. The bottom line is that the driver gets his fuel; the transaction data can come later. The other video was produced to show how to review a unit's total transaction history as well as how to order new cards or change protocol on existing cards over the Internet.

DESC's goal is to see more fueling and maintenance locations added in CONUS as well as expansion of the card to support our overseas needs.

The Voyager Credit Card is used primarily for vehicle fuels but there are contractual provisions for automotive maintenance and repair and emergency road service. Voyager signed up more than 144,000 sites, including on-base stations run by NEXCOM and AAFES. On-base fuel service for transient DoD and GSA cars saves the driver from having to leave the base to search for a retail fuel station, especially when many military facilities are located at remote sites.

Other major suppliers that accept the Voyager Credit Card are AMOCO, BP, Chevron, Coastal, EXXON, Getty, Mobil, Phillips 66, Shell, Texaco and Union 76.

What's in the future for the DoD Fleet Credit Card? DESC's goal is to see more fueling and maintenance locations added in CONUS as well as expansion of the card to support our overseas needs. Alternative fuel vehicles, like natural gas-powered sedans, are now available from GSA and those unique requirements need to be covered by credit card purchases. Electronic interfacing between the unit, Voyager, and the program manager will need to be upgraded to allow real-time solutions to problems such as overcharges, tax issues, purchase authorizations and price discounts.

The DoD Fleet Credit Card contract has a total life of 10 years. If the last 10 years are any indication of how information technology influences our everyday transactions, the next 10 years of the new millennium will be doubly exciting!

Implications of JP8+100 for Army Aviation and Ground Forces

By Ed Owen and Ed Frame, TARDEC Fuels and Lubricants Research Facility/Southwest Research Institute, and Mario LePera, LePera and Associates

As the Army has converted to the "Single Fuel on the Battlefield" doctrine and extensively uses JP8 in all diesel-powered ground materiel systems, there are concerns about the acceptability of JP8+100 for Army systems should the Air Force decide to convert to JP8+100 in the future.

The Air Force has been developing new JP8 formulations to improve thermal stability, allowing higher fuel operating temperatures for advanced fighter aircraft. The first additive package developed from this program, the +100 additive, increases thermal stability of JP8 by 100 degrees Fahrenheit and heat capacity by 50 percent, and consists of 25 ppm antioxidant, 70 ppm dispersant/detergent, 3 ppm metal deactivator, and 158 ppm solvent oil. Air Force results show that JP8 cleans internal engine parts, reducing frequency of engine maintenance and generating considerable cost savings for some engine types. As the dispersant/detergent component permanently disables water separators in fueling systems, the Air Force and the Navy are working jointly on development of a "drop in" replacement for filter/separators, which is necessary for introducing JP8+100 into current fuel distribution/hydrant systems.

The use of JP8+100 is currently limited to fighter, training, and other aircraft fueled by R9 and R11 refueler trucks modified with Velcon Aquacon cartridges replacing the existing filter/separator. Although conversion of all fighter and trainer aircraft is to be completed by the end of FY 1999, the Air Force has not yet decided whether to expand JP8+100 to larger aircraft, although testing of C-130 and C-141 aircraft has been underway. While JP8's military specification MIL-T-83133D includes provision for the +100 additive, Air Force policy provides for injection of the +100 additive into the fuel at refueler truck loading racks just prior to the refueling of aircraft. Extensive testing continues at 42 locations in the United States and one in the United Kingdom, with more than 2,022 fighter, training and cargo aircraft and helicopters successfully using the new JP8+100.

Differing Army and Air Force fuel systems have raised concerns about the use of JP8+100 for the Army's ground equipment vehicles.

Army Concerns

With the known dispersant/detergent quality of JP8+100 fuel, the differing fuel systems that exist between the Army and the Air Force have given rise to concerns for the Army about using this formulation for its ground equipment vehicles. For example, fuel tanks that previously contained diesel fuel are more prone to oxidized fuel deposits, debris, condensed water, etc., as compared to the relatively cleaner fuel tanks of aircraft and ground equipment exposed to JP8. Other concerns are:

(1) Potential filterablility problems

(2) Water reaction and generation of emulsions

(3) Removal of existing deposited materials

(4) Increase in small particulates being introduced into the injectors and combustion chamber

(5) Difficulty in differentiating between JP8 and JP8+100 in the field

(6) Compatibility of elastomer materials

(7) Increased potential for microbiological growth

In addition, the +100 additive permanently disables water separators in vehicle fuel filters, which remain disabled after the additive is no longer present. Failure to remove water results in corrosion and seizures of fuel injectors, and greatly encourages the proliferation of microbiological growth.

The +100 additive removes dirt and scale (previously deposited materials) from dirty fuel systems, carrying these contaminants downstream and plugging fuel filters. Initial use might result in a large concentration of small debris passing through fuel filters. However, Air Force evaluations in diesel-powered equipment, limited to flight line support equipment, have shown only minor initial filter plugging problems.

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Potential Benefits

There are, however, many potential benefits associated with using JP8+100 for Army aircraft and ground vehicles and equipment that could parallel benefits documented by the Air Force. For example, aviation and ground equipment achieve the following benefits from using JP8+100:

(1) Reduced maintenance of helicopters currently having engine deposition problems

(2) Reduced injector nozzle fouling and nozzle clean-up labor costs for the ABRAMS tank

(3) Increased fuel system component life of Army diesel-powered equipment

(4) Potential for improved performance with reduced engine size and weight, and

(5) Increased ability to use the fuel as a "heat sink" in future aircraft designs.

However, the costs to replace the large number of filter/separators in the Army's fuel supply and distribution system would likely overwhelm any benefits with using the JP8+100 *unless* replacements would occur through normal attrition.

The Army recently initiated their JP8+100 Evaluation Program which involves a two-phase effort. Phase 1 consists of the Impact Study; Phase 2 consists of Acceptance Testing.

Phase 1 Tasks:

Task 1—Identify scenarios where Army may be exposed to JP8+100

Task 2—Investigate/confirm elastomer and seal compatibility

Task 3—Determine cost benefits versus Army implementation analysis

Task 4—Determine short-term impact for selected Army aviation and ground vehicles and equipment

Objectives for Phase 1 are:

(1) identify unique problems to be resolved

(2) identify potential benefits of JP8+100 for the Army

(3) provide preliminary cost-benefit analyses

(4) develop a test and evaluation plan for Army acceptance of JP8+100, and

(5) provide recommendations for proceeding to Phase 2.

The preliminary findings generated to date have focused primarily on Task 1, which identified those situations where JP8 is directly transferred from Air Force to Army users. For example:

- At common service fuel facilities where Air Force "owned" fuel is issued to Army units. Additional information on these facilities, discussed in the following paragraph, was obtained from the database maintained by the Air Force.
- During Joint Operations occurring at Air Force base locations in the United States and overseas.
- When Army aircraft are refueled at Air Force bases enroute to their destination.
- Where Army National Guard units are co-located at Air Force Air National Guard bases and are dependent on Air Force for fuel support.
- With Army Special Operations Forces activities where Air Force fuel support is provided.

From the limited information collected to date, it is evident that many opportunities exist for the new JP8+100 fuel to be inadvertently introduced into Army aviation and ground vehicles and equipment. The large volume of Air Force-to-Army fuel transfers clearly quantified by the Kelly Air Force Base data further amplifies the potential for inadvertent misfueling of Army materiel with JP8+100.

Development of a final testing program will be based on the results of Phase 1, which will be completed by July 31, 1999. Funding and commencement of Phase 2 have not yet been determined.

Because of quality concerns with using this additive in Army aircraft and ground equipment and the potential for misfueling, it is important that use of JP8+100 be avoided. Until Phases 1 and 2 are completed and final approval is granted, use of JP8+100 is not authorized for Army use.★

FAS Update. . .
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improved management information to allow for better supply and distribution decisions. We'll finally have a system we can use to manage the business. Right now we don't actually use DFAMS in our day-to-day fuel operations. We use data gathered through the weekly reporting process instead."

"I'm really excited about the work we are doing. It's not often you can say that you've built a system that will take an agency into the 21st century," said Lori Bovee, an FAS analyst from the Bulk CBU. "At times we are proposing such radical changes to the business that we feel we should call ourselves the 'Rebel Alliance' rather than the FAS Test Team." Greg Andrilenas, another FAS analyst from the Bulk CBU, chimed in. "I know there are plenty of skeptics out there but I'll say it again. If we build it, they will come."★

Up Close. . .
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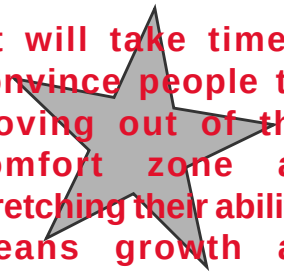
watching and gardening. "One of my most favorite hobbies is needlework. I like to do cross-stitching and a form of needlework called Hardanger. It's really relaxing and I like it a lot," she said. And they make time to take a family vacation every year. They enjoy visiting family in Alaska and taking short trips here and abroad. "It's important just to take a weekend now and again just to get away from the stress and relax. It's good for everyone," she noted.



"It will take time to convince people that moving out of their comfort zone and stretching their abilities means growth and development."

Ms. Morris is a big fan of PORTS (Paperless Ordering and Receipts Transaction Screens) and plans for her CBU to be a serious user of this dynamic, electronic way of doing business. She is convinced that DESC will be pushing the leading edge with technology as all the CBUs begin to use this program. There is no doubt that she will do what she can to keep the Center out in front where doing business smarter is concerned.

One of Kelly's biggest goals for the future is marketing her programs. She wants her employees to be assertive about educating customers to the benefits of the programs available in DESC. She takes her customers seriously and expects her contracting specialists to follow her lead. The focus is and will remain on customers. Another goal is development of Web-based technology to improve every aspect of the business process so that they may eventually be totally paperless.

Employee development is very important to Ms. Morris. She wants every employee in her CBU to have similar opportunities that she has had. She wants them to tackle the tough solicitations. She does not want them to focus on only one program but to move to other divisions and learn about different programs so they expand their knowledge and their skills. Her goal is having well-rounded employees. "We've begun to do this and it's working fairly well. It will take time to convince people that moving out of their comfort zone and stretching their abilities means growth and development."

Ms. Morris' attitude toward changing things in her CBU is grounded in the fact that change must come from within—not by force and not before one takes time to observe how things operate and where there might be a need for change. Ultimately, however, she sees herself as the agent for change. She will provide the opportunities for employees to effect changes in their workplace or in the processes and motivate them to grow professionally. If they have "buy-in," they will also commit to making changes work. She is very comfortable with that. But then, she is a leader who is well-grounded and not at all threatened by workers who are creative and innovative. She thrives on helping them reach their goals.

So this young woman who was born in Montana and lived on a mountaintop knows who she is, where she is headed, and what her priorities and values are. She is a leader with vision and the wherewithal to turn that vision into reality. That she and her employees will succeed, there is no doubt!★

American Petroleum Institute Issues Awards

The Navy Petroleum Institute recently announced the winners of the 1999 American Petroleum Institute (API) award. The API award, established in 1987, recognizes fuel facilities for exceptional performance and improvement during the previous calendar year. The winners by category are: Navy Bulk Fuel Terminal—U.S. Naval Station Rota, Spain; Naval Aviation Fuel Activity—NAS Lemoore, California; Marine Corps Fuel Activity—MCBH Kaneohe Bay, Hawaii.

In 1998, the U.S. Naval Station Rota Fuel Department safely and effectively handled and accounted for more than 180 million gallons of petroleum products without a major accident, spill or loss of fuel. A team of 62 employees provided around-the-clock fuel support to the home station, Sixth Fleet, 37 tenant commands plus NATO and Allied Forces.

NAS Lemoore was recognized for safely handling more than 65 million gallons of petroleum product in support of 11 home-ported squadrons with a total of 175 assigned aircraft. Especially noteworthy is the fact that 1998 marked 30 years of accident-free operation for the Fuels Division at NAS Lemoore.

The MCBH Kaneohe Bay earned the award for being this year's best managed and operated fuel support organization in the U.S. Marine Corps. The department maintained a 21-acre fuel farm, 10 bulk storage tanks, a 360-foot pier, receiving and issue facilities, pipelines, valves and associated equipment in a constant state of readiness.★

Then and Now. . .

Shifting Gears, Burning Rubber With Robbie Robinson

By Claire McIntyre

Lawrence "Robbie" Robinson works amid televisions, monitors, maps, scanners, VCRs, and incoming information from all over the world. The walls are sound deadening, and a hidden mechanism removes the small gap between the bottom of the office door and the floor when the door is closed.

This is controlled access, classified territory—the Defense Energy Support Center's Command Control Center—and while Robbie monitors current events and makes late-breaking information available to DESC's directors—he holds more surprises than just sensitive global military developments.

For example, in his youth he racked up more than 400 trophies for world-class drag racing.

From the late 1950s to the early 1970s, Robbie was burning rubber and grabbing prizes right and left from the National Hot Rod Association with his 1954 Ford and 1969 Chevelle. Add another 100-plus trophies from the International Show Car Association a few years later and the total take comes to about 600 trophies. After awhile, he started to give them away to friends and relatives. Win enough times and the trophies—which manifested in lamps, certificates and ashtrays as well as the more conventional statue-type—become, well, kind of commonplace.

Among his accomplishments, Robbie won the 1967, '68 and '70 E-GAS East Coast Championship in Elizabeth City, North Carolina; Roanoke, Virginia; and Lancaster, Pennslyvania, respectively. The "E" in "E-GAS" refers to the engine's power; on a scale of A through J, A is the most powerful. "GAS" refers to the vehicle's modified engine.

Lawrence "Robbie" Robinson, 1957

What makes for a winner? There's the equipment, for one. Tires, suspension and custom alterations will all maximize speed. Driving skills will also make or break a driver. Knowing exactly when to shift gears, for example, can spell the difference between winning and losing.

Knowing exactly when to shift gears can spell the difference between winning and losing.

Despite the crash and burn ambience of the speedway, Robbie has had no accidents. He admits, however, that "I've blown a lot of engines, transmissions and rear ends." He adds that "it goes with the territory. You've got to accept that this is part of the game."

Perhaps the most noticeable change in racing over the years, observes Robbie, can be found in the involvement of corporate America, which puts huge amounts of money behind today's drivers, displacing "John Q. Average," or the individual racer. Robbie estimates that 85 percent of racing is now backed by corporate sponsorship.

Today in the Command Control Center, digital clocks on the wall display the time in each DESC region—from Hawaii, to Europe, to the Middle East, to Japan. Reuter's News Service and CNN continually update the news via changing screen images, text and broadcast. A classified fax machine rings nearby; it will shut down in mid-reception if any interference surfaces on the phone line.

The tension of time and glitches. Robbie has never gotten away from it. He's accepted it as part of the game.★

Who are they?

Introducing...the *DESC Connection*, a new intranet site for and about DESC employees.

Hi! My name is Kim Sager and I work in DESC Public Affairs. I have just joined the DESC family as a permanent employee after working here for two summers during college. In May, I received my bachelor's degree in Communications from Virginia Tech in Blacksburg, Virginia.

So now that you know a little about me, I would like to know a little about you. I am designing a new online magazine for our intranet and I need your help to get it off to a fabulous start. This publication, *DESC Connection*, is going to be about you. The magazine will be broken down into the following sections:

Unsung Heroes: This section will focus on employees who perform community service outside of work. If you are active in your community, or know someone who is, please send in some information about it or tell me who to contact.

Region Spotlight: Hey, I didn't know we had an office there! That's right Regions, this is your chance to be recognized. Each issue will feature a different Region and the DESC employees who work there.

Hail & Farewell: It's nice to keep up with who's coming to work here and who's left. Send me info or names to keep everyone "in the know."

Then & Now: Do you recgonize the employees in the above pictures? This section will feature old photos of DESC employees, especially baby and early childhood pictures. Find out how well your co-workers really know you. Send in an old photo of yourself and we'll see if people can guess who it is. The identities of those pictured above will be revealed in the first issue of the online publication.

The Honor Roll: Did you receive an honor or an award either on the job or off the job? Then this is your chance to be recognized or recognize a co-worker.

Calendar of Events: This section is intended to keep you informed of upcoming events both at DESC and in your community. If you have an event you would like to advertise, please let me know.

In the Know: This will be a sort of "news you can use" section. It will keep you informed of important agency and government points of interest.

Hobbies & Interests: Are you a gourmet chef? A master gardener? Or perhaps an undercover Rembrandt? Share your hobby or pastime with your fellow employees in our hobbies and interests section. I'll be taking photos!

I am really excited about this new publication and hope you will be too! If you have any ideas or submissions, please send them to me at: ksager@desc.dla.mil or by phone at 703-767-9656.

Please send pictures to:
Kim Sager
Defense Energy Support Center
8725 John J. Kingman Rd, Ste. 4950
Fort Belvoir, VA 22060
(All pictures will be returned.)

DESC Hosts CEPMA Meeting

The Defense Energy Support Center had the honor of hosting the Central Europe Pipeline System (CEPS) Board of Directors meeting in Crystal City, Virginia on June 14-17, 1999. CEPS is a multinational pipeline system consisting of 7,000 kilometers of pipelines and associated storage facilities in France, Germany, Belgium, Luxembourg and the Netherlands. In addition to these host nations, the CEPS facilities are also used by the United States, Canada and the United Kingdom. CEPS is critical to the petroleum logistics supply chain in Central Europe.

As one of the primary sources of fuel used to support the NATO operations in Kosovo, CEPS allowed DESC to move fuel to the United Kingdom Pipeline system to avert product shortfalls at several key bases in the United Kingdom.

As part of the NATO Infrastructure Inventory, CEPS is one of nine NATO pipeline systems. Operating costs for the CEPS are shared by the host and user nations based on each nations' prorated share of the system's capacity. The United States share, funded by DESC and U.S. Army, Europe (USAREUR), is approximately 30 percent of the CEPS operating budget.

The Board meets four times a year under the authority of a NATO charter. The BOD is responsible for all policy decisions related to the management of the CEPS as well as approval of annual budgets and the long-range strategic plan. The Central Europe Pipeline Management Agency (CEPMA), headquartered in Versailles, France, implements the decisions of the BOD and manages the daily operation of the system.

One of the biggest challenges faced by the Board and the Agency in recent years has been how to maintain the CEPS capability during the post-Cold War period when each nation was reducing its defense budgets. Because of a significant reduction in military requirements for the CEPS, the Board needed to cut costs and possibly close facilities in locations where military requirements no longer existed. Both host and user nations threatened to withdraw all financial support for the CEPS if costs were not reduced.

Consequently, the Board explored the possibility of commercialization and approved the establishment of a business manager/ commercial director who would market the CEPS to commercial companies to generate revenues from storage and throughput of commercial products. At the June Board meeting, the nations agreed to make the business manager a permanent position within the CEPMA organizational structure.

Members of the Central European Pipeline System Board of Directors

In addition to discussions about financial and contract operations, DESC Director Gary S. Thurber presented the Department of Defense Distinguished Public Service Award to Retired Lt. Gen. Joseph Charlier, general manager of the CEPMA and former chairman of the Belgian Joint Chiefs of Staff, who will retire this September. The honor is the highest award presented by the Department of Defense to a non-government individual.★

DESC Director Gary S. Thurber, right, presents Distinguished Public Service Award to retired Lt. Gen. Joseph Charlier, Belgian Army.